

Steadman♦Hawkins Research



Photo: Joe Kania.

The Steadman-Hawkins Difference: A Conversation with Mike Egan, CEO

By Jim Brown, Ph.D., Executive Editor



For the past two decades the Steadman♦Hawkins Research Foundation has quietly positioned itself as one of the largest, most productive and innovative, independent orthopaedic research organizations in the world. Well known within the medical community for its excellence, the rest of the world is now recognizing that Steadman-Hawkins has become, simply put, one of the world's leading orthopaedic research foundations.

The person best qualified to make that claim is J. Michael Egan, who joined the Foundation as Chief Executive Officer late last year. Egan has an extensive background that includes strategic planning, marketing, financing, and operating 14 companies in the medical-device industry. Dr. Richard Steadman, founder of the Steadman♦Hawkins Research Foundation, says, "Mike Egan brings a wealth of business knowledge and experience to our organization, and he has a proven record as an innovative, forward-thinking and qualified leader."

Dr. Steadman established the Foundation in 1988. In 1990, he was joined by renowned shoulder surgeon Dr. Richard J. Hawkins. Together, they brought the Foundation's research

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Dr. Marc J. Philippon, one of the world's leading experts on hip arthroscopy.

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production in knee and shoulder studies to a new level.

We asked Egan to explain why the Steadman♦Hawkins Research Foundation is different from all the others. He gave us ten answers.

DIFFERENCE #1 - THE STEADMAN LEGACY

"I came here for three reasons," explains Egan. "Number one, I wanted to be a part of continuing Richard Steadman's legacy. I have watched his vision, which started with the belief that the body has the ability to heal itself, unfold. He was convinced that an average surgical result could become an excellent one with the correct rehabilitation. Early in his career he focused strongly on improving rehabilita-

tion techniques after surgery. Conversely, an excellent surgical result without good rehab would produce a poor outcome.

"Within a few years, Dr. Steadman developed the microfracture technique, which was at first widely criticized by the orthopaedic establishment. Once the success of his outcomes became irrefutable, the orthopaedic community accepted him as a leader in his field. The second reason I joined the Foundation was to ensure an appropriate succession. When I met Dr. Steadman in 1984, he was performing 600 surgical procedures a year. With the addition of world-renowned surgeons, surgical procedures have doubled during the past three years to nearly 4,000. Though Dr. Steadman shows no signs of easing off, he is very determined to take the steps necessary to

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Taking Advantage of the Charitable Gift IRA Rollover Legislation: "It Was Easy and It's Good Stuff for Mankind."

"We wanted to utilize the full minimum distribution required from our IRA and have it make a difference. It was so easy. And a gift to the Foundation — that's good stuff for mankind," says O.B. Shelburne. That's what prompted him and his wife Rita to take advantage of Congress' 2006 legislation, the Pension Protection Act, permitting charitable gifts to be transferred from IRAs directly to charitable organizations.

The Shelburnes' tax bracket is at a level that making an outright gift to the Foundation isn't financially advantageous. By taking advantage of the legislation, they made a wonderful gift and satisfied their minimum distribution requirement without increasing their taxable income.

Our Gift Did That!

The Shelburnes created the Rita and O.B. Shelburne Fellowship Fund in the Biomechanics Lab. Why did they make that choice? Their son, Kevin B. Shelburne, Ph.D., a senior staff scientist in the lab, keeps them abreast of the cutting-edge research and accomplishments of the lab. With a distinguished career in the space program, Kevin is now a leading world researcher in biomechanics and computer modeling of joints, which is transforming approaches to surgery and treatment.

"We don't have a medical history with the Foundation. We've never been patients, but we like the research areas of the Biomechanics Lab and when advances occur we can say that our gift did that! It's a great way to feel connected to the difference you can make."



The Shelburnes, with a family of three children, eight grandchildren, and two great-grandchildren, are retired and live in the Texas hill country. After growing up and marrying in Texas, they moved to Wisconsin, where Mr. Shelburne received a Ph.D. in geology and pursued a 32-year career with Mobil Oil.

For others who may be considering a gift, Mr. Shelburne encourages folks to do so. "It's a great feeling to help people. And this was a wonderful and easy opportunity to get involved."

Opportunity Expires December 31, 2007

For now, the opportunity remains only until the end of 2007 for those 70+ (at the time of the gift) to take advantage of this previously unavailable avenue to make a gift. You can give any amount up to \$100,000. Because your gift is transferred from your IRA directly to a charity, it's tax neutral, making it possible to access assets that were previously unattractive for charitable giving.

For more information, please contact John McMurtry, Vice President for Program Advancement at 970-479-5781 or john.mcmurtry@shsmf.org.

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carry on the Foundation's work indefinitely. The third reason I'm here is to continue building the number one orthopaedic sports medicine research facility in the world."

DIFFERENCE #2 – SURGEONS, SCIENTISTS AND MANAGEMENT

The relationship between the Foundation and the Clinic is unique. The Clinic doctors receive no economic benefit from the Foundation. As a matter of fact, every Clinic doctor contributes financially to the Foundation. However, the Foundation benefits from the innovative thinking of the Clinic doctors and their patients' data is used in the Foundation's clinical research. The Foundation and Clinic have each successfully recruited some of the best surgeons, researchers and management from countries around the world, including Canada, Japan, Holland, China, and Germany. "They know," says Egan, "that this place is different from institutions associated with universities. The doctors and scientists have the freedom to practice clinical medicine and to pursue research based on their goals, instead of those dictated by a university. The succession plan is well underway with extraordinary young doctors joining the Clinic. They are the reason for the significant increase in surgical cases. Very talented individuals have joined the Foundation as well. Some of the gifted experts are:

- Dr. William Sterett, 46, a Steadman-Hawkins Fellow, trained in Switzerland and Germany in trauma and joint preservation before joining the team in Vail.
- Dr. Marc Philippon, 41, came from the University of Pittsburgh and is one of the world's leading experts on hip arthroscopy.
- Dr. Peter Millett, 39, also a Steadman-Hawkins Fellow, left Harvard to practice medicine and conduct research at Steadman-Hawkins.
- Dr. Thomas Hackett, 40, came from the famous Kerlan-Jobe Orthopaedic Clinic in Los Angeles.
- Dr. Randy Viola, 41, is a hand and upper-extremity specialist who trained in Vail as a Steadman-Hawkins Fellow. He also completed a hand fellowship at Indiana Hand Center.
- Dr. David Karli, 36, specializes in the non-operative treatment of spinal disorders and is trained in physical medicine and rehabilitation.

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Research Breakthroughs and Awards Foundation hip research leads the world.

At the American Academy of Orthopaedic Surgeons meeting in San Diego earlier this year, seven studies on hip arthroscopy were accepted for presentation. The Steadman-Hawkins Research Foundation produced five of those seven studies.

The **Arthroscopy Association of North America (AANA)** at its annual meeting presented Foundation scientists and physicians with two significant awards:

Steadman-Hawkins 2005 Fellow **Todd L. Johnston, M.D.**, and the Foundation's Clinical Research department was recognized recently (April 28) by AANA with the **2007 Clinical Research Fellows Essay Award** for research entitled *Hip Alpha Angles as Radiographic Predictors of Chondral Injury in Femoroacetabular Impingement*. This study applied advanced techniques in arthroscopic surgery of the hip to investigate potential causes of early hip arthritis. The paper was presented at the national meeting in April.

In addition to Dr. Johnston, the authors of the paper include Dr. Marc Philippon, Karen K. Briggs, and Mara Schenker. The criteria for the award was based on scientific quality, design, and data analysis; relevance to arthroscopy; and originality, clarity, composition, completeness, and organization of the application. This is the third time the Clinical Research department has won this award, winning previously in 2001 and 2006.

Since graduating from the Steadman-Hawkins Fellowship Program in 2006, Dr. Johnston has proudly joined his father in a busy practice at Cedar Valley Medical Specialists in Waterloo, Iowa.

Also at the AANA annual meeting, Steadman-Hawkins 2007 Fellow **Brett Cascio, M.D.**, was awarded the Resident/Fellow Scholarship for research he conducted through the Department of Biomedical Engineering and Department of Orthopaedic Surgery at Johns Hopkins University and in conjunction with Cartilix, Inc. The title of the paper was *Repair of Cartilage Defects with Photopolymerizable Hydrogel, Adhesive, and Bone Marrow Stimulation in a Large Animal Model*. The project involved the use of a liquid hydrogel to fill in cartilage defects. Ultraviolet light is used to gel the polymer. Microfracture, the procedure developed by **Dr. Steadman**, is used to provide stem cells which become embedded in the hydrogel and hopefully become cartilage cells. A human trial is going to start in Europe in the next 12 months. The award was based on scientific quality, design, and data analysis. The research has also been presented at the American Orthopaedic Society for Sports Medicine, the American Academy of Orthopaedic Surgeons, and the American Orthopaedic Association annual meetings.

Dr. Cascio attended Duke University, where he majored in history and biology. He graduated from Louisiana State University Medical School in New Orleans with honors, where he was president of Alpha Omega Alpha. Dr. Cascio completed his orthopaedic surgery residency at The Johns Hopkins Hospital, where he was named Administrative

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“Donors need to know that more of their money is going directly into research. Our overhead costs are less than half of that of other institutions,” says Egan. “A dollar here goes farther than it does in other places.”

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- Dr. Donald Corenman is an orthopaedic surgeon with a doctorate in chiropractic specializing in the treatment of the spine.
- Lyon Steadman is CEO of the clinic. Under his stewardship, the number of physicians and surgery volume have doubled.
- Charles Ho, M.D., Ph.D., is a world-renowned authority in musculoskeletal imaging, specializing in MRI of sports and orthopaedic injuries. Dr. Ho’s Ph.D. is in electrical engineering.
- Karen Briggs, M.P.H., M.B.A., heads the Clinical Research department and oversees the most widely published clinical research organization of its kind in the world.
- Marilee Horan, B.S., coordinates all shoulder-related clinical research. She has also managed the quality control of the clinical database to ensure all data collected is of the highest quality.
- William G. Rodkey, D.V.M., recognized worldwide for his research, heads the Basic Science department, which collaborates through his relationships with universities such as Colorado State University, Michigan State University, Cornell, Columbia, and the University of Pittsburgh.
- Michael Torry, Ph.D., director of the Biomechanics department, has been recruited by several prestigious universities, but chooses to stay in Colorado with the Foundation to pursue significant research initiatives in the field of biomechanics.
- Kevin Shelburne, Ph.D., Senior Staff Scientist, is one of the Foundation’s most productive and published researchers.
- Erik Giphart, Ph.D., a native of Holland, is developing the dual-plane fluoroscopy system.
- Feng Zhang is an engineer who has two master’s degrees — one in mechatronics (a combination of electrical and robotic engineering) from Shanghai Jiaotong University in China and the other in orthopaedic biomechanics from the University of Kansas.

In addition, the management team has grown to meet the increasing demands of the Foundation’s research teams and future direction. Two noteworthy additions include:

- Marc Prisant, Executive Vice President and CFO, who brings extensive experience as a chief financial officer in venture capital, including work at several portfolio companies, in the fields of biotechnology and proprietary medical devices.
- Paige Prill, development and communications officer, who has a broad background in communications and fundraising, managing all aspects of corporate communications for corporations that include Vulcan, Inc.; Microsoft; and Turner Broadcasting Systems, Inc.

DIFFERENCE #3 – LOW OVERHEAD, EASY ACCESS, AND GOOD COMMUNICATION

“Donors need to know that more of their money is going directly into research. Our overhead costs are less than half of that of other institutions,” says Egan. “A dollar here goes farther than it does in other places.

“Other research organizations have not been created around one person’s vision,” says Egan. “They have different entities, including deans, faculty members, departments, and colleges, competing for funds. Communication is difficult or sometimes nonexistent. At Steadman-Hawkins, there is a closeness and team approach that does not exist in other places. Everything — doctors’ offices, Foundation offices, imaging, the Clinic, rehabilitation facilities, research laboratories — is in one building. The Clinic/ Foundation connection is our greatest asset.”

The Clinic/Foundation relationship, the low overhead, and the communication that exists among departments allow the Foundation a degree of flexibility that others cannot duplicate. Decisions regarding research efforts can be made quickly, and resources can be redirected as new opportunities develop.

DIFFERENCE #4 – EVIDENCE-BASED MEDICINE

The records of every patient seen at the Clinic have been entered into a massive database at the Foundation since 1993. Approximately 450 pieces of information, objective and subjective, exist on every patient. Egan says there are now 15,000 knees (meaning surgical procedures on knees), 5,000 shoulders, and almost 1,000

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“We are already the most published clinical research institute for sports medicine in the world.”

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hips in the database. Patient outcomes are tracked 5-10 years after surgery. The goal is to monitor progress over a number of years to determine how long patients experience continued improvement and whether they require additional surgery. The evidence-based information related to patient outcomes is made available to physicians around the world through presentations, consultations, and publications, contributing to their continuing medical education.

Egan gives us an example of how the Foundation’s database has changed surgical procedures. “By looking at retrospective cases of knee surgery, Clinic physicians learned that portals (openings) traditionally used during knee surgery lead to unacceptable levels of scar tissue. Moving the location of one of those portals by a few millimeters produces significantly less scar tissue.”

DIFFERENCE #5 - THE FELLOWSHIP PROGRAM

Every year, about 650 orthopaedic surgery residents graduate from medical schools. Between 130 and 150 of them seek to continue their higher education in sports medicine orthopaedics. Last year, 163 applications for the Steadman-Hawkins Fellowship Program were received from young surgeons in the United States and abroad. After interviews and presentations, six were selected to be Steadman-Hawkins Fellows. “Most — six out of eight last year — chosen by our screening committee accept,” says Egan. “A majority of them have already been published by the time they arrive in Vail for their year of clinical practice and research — all sponsored by the Foundation.”

The fellowship and education programs are coordinated by John Feagin, M.D. Dr. Feagin is another world-class authority in orthopaedics who has chosen to live in Vail. He is an associate professor emeritus of orthopaedic surgery at Duke University and is considered by many to be one of the fathers of sports medicine.

More than 160 former Steadman-Hawkins Fellows practice all over the world,



photo: John Kelly

Dr. Steadman, right, with Steadman-Hawkins Fellow Dr. Kevin Crawford.

and many are on faculties at leading universities such as Harvard, Stanford, and Michigan. Many of them return to Vail twice a year to continue their education and to share their experiences with Steadman-Hawkins physicians and researchers.

DIFFERENCE #6 – PRESENTATIONS AND PUBLICATIONS

“We are already the most published clinical research institute for sports medicine in the world,” states Egan. “In 2005 alone, Steadman♦Hawkins Research Foundation doctors and scientists made 175 presentations at scientific meetings. At the American Academy of Orthopaedic Surgeons meeting in San Diego earlier this year, seven studies on hip arthroscopy were accepted for presentation. The Foundation produced five of those seven studies.

The three major medical journals in orthopaedic sports medicine are the *Journal of Bone and Joint Surgery*, the *American Journal of Sports Medicine*, and *Arthroscopy*. The Steadman♦Hawkins Research Foundation tracked its number of publications in these three journals during a recent three-year period and compared the results to four other top academic sports medicine programs. Steadman-Hawkins ranked first in the number of publications, ahead of Cleveland Clinic, Hospital for Special Surgery in New York City, University of Pittsburgh, and Methodist Sports Medicine in Indianapolis.

DIFFERENCE #7 – THE PATIENTS

Some of the world’s greatest athletes have come to Steadman-Hawkins Clinic for treatment. They come because their agents or team management understand that evidence-based sports medicine can get their people back into competition and performing at the

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highest level.

That kind of recognition might give the mistaken impression that the Clinic is just a place where athletes, entertainers, and world leaders come for treatment. But the vast majority of patients are not-so-famous everyday citizens. Dr. Steadman says that his greatest source of satisfaction is making it possible for all of his patients to be as active as they want to be throughout their lives.

How has the research conducted at Steadman-Hawkins filtered down to the neighborhood jogger? "It means that that person, in any city worldwide, might have had a procedure that was developed here and allows him or her to continue exercising," answers Egan.

DIFFERENCE #8 – THE SCIENTIFIC ADVISORY COMMITTEE

Thirteen of the world's preeminent scientists make up the Foundation's Scientific Advisory Committee (SAC) — possibly the most accomplished group of surgeons and scientists ever assembled as an advisory group. Their role is to provide scientific guidance to the Foundation, to help give its work direction, and to provide mid-course corrections when needed. These world-class scientists not only add to the ability of the Foundation to make changes when necessary, they also provide ongoing counsel to the Foundation's doctors and researchers. The ultimate goal of the SAC is to ensure that the research process leads to improved patient care.

DIFFERENCE #9 – BREAKTHROUGH PROCEDURES

Although Dr. Steadman's innovative microfracture technique, validated through the Foundation's research, has received the most attention (more than a million procedures have now been conducted worldwide), other new or improved medical procedures are equally important and have gained international acclaim. Among them are the healing response, surgery and rehabilitation that reduces the incidence of scar tissue, "the package" approach to treat arthritis in the knees, early arthroscopic intervention of the hip (which may delay or eliminate the need for joint replacement), and identifying the biochemical factors that trigger arthritis. And most recently, a new and exciting Foundation innovation is the use of dual-plane fluoroscopy, which com-

bines x-rays, high-speed cameras, and sophisticated software to provide amazingly accurate and comprehensive views of real-time motion within the shoulder, hip and knee joints. This has never been achieved until now. "The technology is being tested and should be up and running by the end of the year. We will be synchronizing the system with magnetic resonance imaging for accurate information about soft tissue, within and surrounding the joints, during motion," says Egan.

DIFFERENCE #10 – GROWING TO BECOME THE NUMBER ONE SPORTS MEDICINE RESEARCH FACILITY IN THE WORLD

There was one more question for Mike Egan. Where do you want the Steadman♦Hawkins Research Foundation to be in five years? "We want the Foundation to be the number one sports medicine research facility in the world. The Clinic expects to have 15-20 doctors on board, each specializing in an orthopaedic area of expertise, and we will continue to update our state-of-the-art facilities and equipment. Our budget to support the research efforts of the Foundation is expected to triple. The Foundation's research will have a dramatic positive impact on the acceptance of hip arthroscopy worldwide. The only way to achieve these ambitious goals is with the continued generous support of the people who have received treatment, benefited from Steadman-Hawkins research, or have been made aware of our programs."



RESEARCH UPDATE

New Research Initiative: A Step Into the Future

By Michael R. Torry, Ph.D.

Editor's note: Dr. Torry is Director of the Biomechanics Research Laboratory at the Steadman♦Hawkins Research Foundation.

The Biomechanics Research Laboratory (BRL) has excelled over the past four years, winning five international and national research awards in acknowledgment of its pioneering work in orthopaedic research. To excel and remain at the cutting-edge level in our research, we must persistently develop new technology to meet the needs of the orthopaedic surgeon and ultimately the patient. That is the hard part about what we do, and this often

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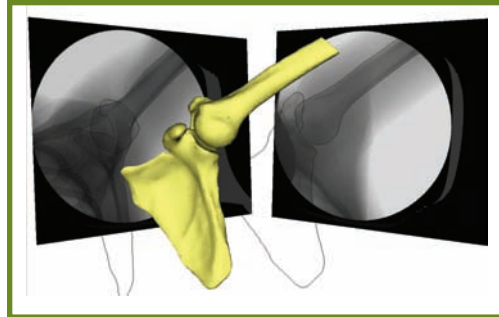
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means being very creative, innovative, and even inventive, in our approach to medical research. Sometimes you have to look at what you are doing and make the decision that you can advance the state-of-the-art of our profession and science in general.

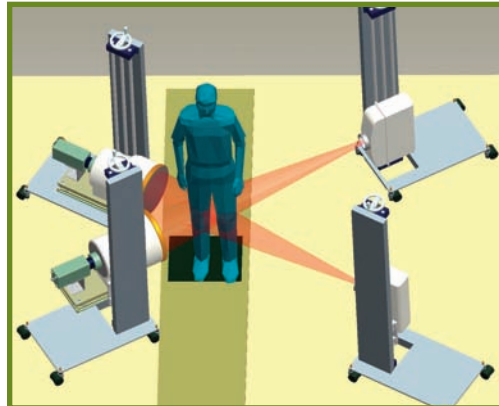
With this in mind, the BRL is pioneering an ambitious, innovative research initiative that will keep its work at the forefront of orthopaedic technology. Entitled "A Step Into the Future," the BRL is developing a 3-D dynamic-motion-imaging system (dual-plane fluoroscopy) to investigate human motion at a level of detail and scrutiny that has not been possible until recently.

Why is this advancement in technology required, and how will it help patients? Nearly everyone reading this newsletter has experienced a trip to the orthopaedic surgeon's office. This trip is most often associated with an additional trip to the MRI station and/or the X-ray station so the doctors can get a "view" of what is inside the joint. While taking the MRI or X-ray scan, the imaging technician tells us to remain perfectly still. This is a major problem and it is in stark contrast to the doctor's assessment where the clinician often requires the patient to bend or flex the joint in an attempt to reproduce and localize the pain. Thus, most often the pain a patient feels in a joint actually occurs while he is moving, not lying still as was imaged by the MRI or X-ray. So the fundamental basis for this new research initiative is quite simple — to combine the MRI and X-ray data with the patient's motion and report the movements of the bones while he is actually moving, creating a set of 3-D dynamic motion images that can be viewed from any perspective.

The potential for this information in its practical application to orthopaedic surgery is limitless. The BRL will start with a simple motion such as walking — hence the title, *A Step Into the Future* — and then progress into more dynamic motions. But this project offers a unique opportunity to investigate numerous research questions that are persistently plaguing the orthopaedic practice. In our application of this technology, the BRL is working with such noted researchers as Dr. Savio Woo (University of Pittsburgh) in order to investigate knee function pre- and post-lysis of adhesions (removal of scar tissue), a surgery pioneered by Dr. Steadman. In another application and in collaboration with Dr. Peter Millett, the BRL is using this technology to investigate total-



Graphical representation of the analysis results for one frame of a dual-plane fluoroscopy recording of an arm raise. The 3D projected contours of the bone models depicted in the foreground matched onto the contours in the real fluoroscopy images in the background with an error of only 0.2mm.



Computer rendering of the dual-plane fluoroscopy system imaging a knee as it will be implemented in July 2007.

shoulder-replacement surgeries with the hopes of improving implant design and surgical placement. Still another application is in the assessment and validation of hip clinical exams to diagnose hip laxity in collaboration with Dr. Marc Philippon. From the shoulder to the foot and the assessment of footwear, this technology offers unparalleled insight into each joint's specific function.

The development of this technology will allow us to compete at the top tier for National Institutes of Health (NIH) and National Science Foundation (NSF) grants. For more information and how to donate to the capital campaign for this exciting new research initiative, please contact John McMurtry or Dr. Michael Torry.



PATIENTS IN THE NEWS

Kim Gustafson: Bad Knee Leads to Good News

By Jim Brown, Ph.D., Executive Editor

The doorbell rang, but Kim Gustafson didn't let it interrupt the conversation. He made his way to the front door, answering questions the entire time, and picked up a package left by a UPS driver. Still talk-

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Chief Resident. Dr. Cascio is a Captain in the U.S. Army Reserves.

The Arthroscopy Association of North America is an accreditation council for continuing medical education. AANA exists to promote, encourage, support, and foster the development and dissemination of knowledge of arthroscopic surgery in order to improve upon the diagnosis and treatment of diseases and injuries of the musculoskeletal system.



Publications, Presentations and Research

Karen Briggs, director of Clinical Research, reports that 2007 has been a record-breaking and prolific year for the Foundation. Numerous papers have been accepted by prestigious medical and scientific societies and journals.

The year has included a very significant first acceptance by the Foundation of a peer-reviewed hip arthroscopy publication: *Return to Sport Following Arthroscopic Decompression for Femoroacetabular Impingement in Professional Athletes*. Philippon MJ, Schenker ML. In press, "Knee Surgery, Sports Traumatology and Arthroscopy."

2007 Annual Meeting of the American Academy of Orthopaedic Surgeons

The 74th Annual Meeting of the American Academy of Orthopaedic Surgeons (AAOS), San Diego, February 14-18, accepted eight podium presentations and one poster presentation highlighting Foundation research, and two instructional course lectures.

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 not-for-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 about 24,000 members internationally.

Additionally, The American Orthopaedic Society for Sports Medicine Specialty Day accepted three podium presentations and one symposium.

PODIUM PRESENTATIONS

Are Outcomes of Microfracture for Isolated Chondral Defects in the Knee Related to Location? Hunt SA, Noble D, Briggs KK, Steadman JR.

ACL Injury Patterns and Associated Pathologies in the Adolescent Knee. Carreira DS, Kuppersmith D, Briggs KK, Steadman JR.

Predictors of Patient Expectations for HTO vs TKA. Briggs KK, Matheny L, Sterett WI.

Improvement Following Arthroscopic Hip Surgery. Briggs KK, Philippon MJ.

Hip Labral Healing after Repair: Results from Second-Look Arthroscopy. Johnston T, Schenker ML, Philippon MJ.

Intra-articular Hip Injury Patterns in Professional Hockey Players. Philippon MJ, Schenker ML, Kuppersmith D.

Hip Alpha Angles as Predictors of Acetabular Chondral Injury in Femoroacetabular Impingement. Johnston T, Schenker ML, Briggs KK, Philippon MJ.

Labral Tear Morphology is Associated with Type of Femoroacetabular Impingement. Philippon MJ, Kimmerly WS, Schenker ML, Briggs KK.

POSTER PRESENTATIONS

Outcomes Following the Healing Response Procedure to Treat Full-Thickness Tears of the Proximal ACL. Carreira D, Steadman JR, Matheny LM, Briggs KK, Rodkey WG.

Instructional Course Lectures

The Post Meniscectomy Knee. Sterett, WI.

Surgical Anatomy of 10 Common Upper Extremity Conditions: A refresher for the general orthopaedic surgeon. Millett PJ.

The American Orthopaedic Society for Sports Medicine Specialty Day Podium Presentations

Clinical Symptoms, Function, and Activity Levels Correlate with Degree of Tissue Loss Following Meniscectomy. Rodkey WG, Briggs KK, Steadman JR.

New Tissue Generated by the Collagen Meniscus Implant (CMI) Leads to Increased Activity Levels After 2 Years. Rodkey WG, Briggs KK.

Interobserver and Intraobserver Variability in the Diagnosis and Treatment of SLAP Lesions. Gobezie R, Zurakowski D, Millett PJ, Coel BJ, Warner JP.

The American Orthopaedic Society for Sports Medicine Specialty Day Symposium

Articular Cartilage – Microfracture. Steadman JR.

2007 Arthroscopy Association of North America (April 26-29, 2007, San Francisco)

AANA accepted the following presentations:

Outcomes Following Hip Arthroscopy with Microfracture. Philippon MJ, Briggs KK, Kuppersmith DA, Hines SL, Maxwell RB.

Early Outcomes Following Arthroscopic Labral Repair in the Hip. Philippon MJ, Hines SJ, Kuppersmith DA, Maxwell RB.

Collagen Meniscus Implant; Decreased Rate of Re-operation in Chronic Patients: A Survivorship Analysis. Briggs KK, Rodkey WG, Steadman JR.

Tissue Loss at Meniscectomy Correlates with Clinical Symptoms, Function, and Activity Levels. Rodkey WG, Briggs KK, Steadman JR.

The following teaching video produced by the Foundation was accepted at AANA:

Technique Focus Video: *Arthroscopic Labral Repair*. Philippon MJ.

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6th Biennial International Society of Arthroscopy, Knee Surgery and Orthopaedic Sports Medicine Congress (ISAKOS), Florence, Italy, May 27-31

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.

The following Podium presentations were accepted:

Hip Range of Motion in Professional Baseball Players. Philippon MJ, Kuppersmith DA, Clark MA, Noonan TJ.

Outcomes of Microfracture for Isolated Chondral Defects in the Knee Are Related to Lesion Location. Hunt SA, Noble D, Briggs KK, Steadman JR.

Hip Alpha Angles as Radiographic Predictors of Chondral Injury and Decreased Hip Range-of-Motion in Femoroacetabular Impingement. Johnston TL, Schenker ML, Philippon MJ.

Radiographic Evidence of Acetabular Dysplasia as a Predictor of Hip Joint Instability and Laxity. Schenker M, Johnston TL, Philippon MJ.

Psychometric Properties of a Patient Satisfaction Score Following Arthroscopic Knee Surgery. Briggs KK, Horan M, Matheny LM, Steadman JR.

Electronic Posters included:

Outcomes Following the "Healing Response" Procedure to Treat Full-Thickness Tears of the Proximal ACL. Carreira D, Steadman JR, Matheny LM, Briggs KK, Rodkey WG.

ACL Injury Patterns and Associated Pathologies in the Adolescent Knee. Carreira DS, Kuppersmith D, Briggs KK, Steadman JR.



The 2006 Steadman-Hawkins Fellows Meeting December 7-10, 2006

The Steadman◆Hawkins Research Foundation hosted the 2006 *Steadman-Hawkins Fellows Meeting* on December 7-10, 2006, at the Sonnenalp Resort of Vail. There was a tremendous turnout this year, with over 40 fellowship graduates returning to Vail from across the country to take part in this meeting, which provides an academic forum for the exchange of ideas between current Steadman-Hawkins staff and past and present Fellows. Since the care of athletic injuries continually evolves as basic science knowledge and clinical experience increases, there is a great interest among fellow alumni and current staff to gather regularly and candidly discuss what's on the cutting edge of sports medicine.

The meeting spanned three days and covered care of the lower extremity, upper extremity and, now with the addition of Dr. Marc Philippon to the Vail fellowship program, the innovations in hip arthroscopy. Fellow alumni

and current physicians from the Steadman-Hawkins fellowship programs in Vail, Denver, and Spartanburg, South Carolina, attended the conference and enjoyed returning to Vail for education, camaraderie, and beautiful early season conditions on the slopes.



Media

NBC TODAY SHOW VISITS FOUNDATION



Kevin Tibbles interviews Dr. Marc Philippon, right.

On April 9, the Biomechanics Research Laboratory of the Steadman◆Hawkins Research Foundation hosted a film crew from the NBC *Today Show*. The crew of five, including on-air personality Kevin Tibbles, visited the Foundation to tape the ongoing biomechanics research of ice hockey players. The objective of this research is to prevent needless injuries among youth hockey players through the teaching of correct biomechanics by coaches.

The crew filmed interviews with the director of the Biomechanics Research Laboratory, Michael Torry, Ph.D.; Steadman-Hawkins hip surgeon Marc Philippon, M.D.; and research intern Ted O'Leary. The taping also included demonstrations of the equipment and procedures involved in the study of biomechanics.

Using the visual appeal of this ice hockey study and the biomechanics laboratory, the NBC segment showcased how the research of the Foundation impacts the lives of millions worldwide by studying the causes of orthopaedic injury and devising techniques to prevent them. The mission of the Foundation's research is to benefit mankind.

Rob Blake, defenseman for the Los Angeles Kings, was also interviewed for the segment. He stated that any research that could help his son and other youth hockey players avoid injury was well worth conducting. Blake also said he wished the study could have been conducted while he was coming through the ranks as a player.



Kim Gustafson

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ing, he opened the package and looked, for the first time, at the prototype of an experimental “unloading brace” for skiers that he helped design.

The brace isn’t Gustafson’s first product. He has worked in various marketing, management, and engineering-related positions in the United States and Europe for the past 30 years. “My brother, David, and I have now set up our own company — Opedixlabs — for developing sports-related and medically supported products,” says Gustafson, a 1971 graduate of the University of Colorado. “I’ll test this prototype on the snow tomorrow and then it will go to the Biomechanics Research Laboratory at the Steadman♦Hawkins Research Foundation for scientific testing.”

If the brace gets to market, a portion of the sales will go back to the Foundation to support additional research. Gustafson has been working with Michael Egan, the Foundation’s CEO, and Michael Torry, Ph.D., who directs the work of the Biomechanics Research Laboratory, to establish an ongoing research effort between Opedixlabs and the Steadman♦Hawkins Research Foundation. Together, they are also developing a pair of compression tights, a piece of apparel that incorporates a special banding component that also takes some of the load off the knees while running, walking and cycling, as well as many other physical activities.

THE GUSTAFSON FAMILY FOUNDATION

But the Steadman♦Hawkins Research Foundation won’t have to wait for potential sales from Opedixlabs products to get financial support from Kim and his family. The Gustafson Family Foundation has been giving money to charitable organizations for years. One of the recipients is the Mayo Clinic, which uses the Gustafson donations

to fund the da Vinci Surgical System, a product developed by Intuitive Surgical that combines three-dimensional visualization with a robotic arm that can operate through tiny incisions.

Since 2003, the Gustafson Family Foundation has been supporting research at the Steadman♦Hawkins Research Foundation, partly because its mission is so different from that of many other organizations. Gustafson contributions have helped fund a chair in the Biomechanics Research department.

“I became interested in the Steadman-Hawkins Clinic because of a knee injury I got while jogging in a park in London,” says Gustafson. “Later, I hyper-extended that same knee to the extent that it ruptured the ACL. I received treatment, but eventually the pain returned, and I had to look somewhere else for help. I met John McMurtry, the Vice President for Program Advancement at the Foundation, and he suggested that I let Dr. Steadman look at my knee. Two microfracture surgeries later, I am able to do three things that I couldn’t do before: ski, teach other people to ski as an instructor with the Vail ski school, and work as a wrangler during the summers on a friend’s cattle ranch in the high country of Colorado.”

FROM ONE FOUNDATION TO ANOTHER

While Gustafson was being treated at the Steadman-Hawkins Clinic, he became aware of the Steadman♦Hawkins Research Foundation. When he told his father and siblings about the work being done at the Foundation, the family decided that its Foundation money would be well spent at Steadman-Hawkins. “My father is in his 80s and commented that walking is about the only form of exercise for many older adults,” explains Gustafson. “He said he would like to support research that is making it possible for millions of Americans who suffer from osteoarthritis to keep on exercising — even if it’s just walking.”

MORE THAN A WALK IN THE PARK

Gustafson is not ready to restrict his exercise routine to walking just yet, and he sees another big-picture benefit resulting from Steadman-Hawkins research. “Skiing, especially in Colorado, is a very important industry. If we start losing the baby boomer generation to knee injuries and arthritis, it

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will have a tremendously negative impact on the state's economy. By conducting research on new products and developing new diagnostic, surgical, and rehabilitation procedures, the Steadman♦Hawkins Research Foundation will continue to separate itself from other organizations.

"It's ironic," says Gustafson, "that if it hadn't been for my knee injuries, I probably wouldn't have been curious about developing these new products, and I wouldn't have realized the unique nature of the research being done at Steadman-Hawkins. Speaking for myself and for the Gustafson Family Foundation, it is exciting to be associated with the Steadman♦Hawkins Research Foundation, and I hope our relationship will continue to grow and benefit people around the world."



MEET OUR INTERNS

Ted O'Leary: Fast-Track Intern

By Jim Brown, Ph.D., Executive Editor

To say that Ted O'Leary is on a fast track is an understatement. At 24, he already has a B.S. (magna cum laude) in biological sciences and an M.B.A., both from the University of Denver. Prior to enrolling at DU, he was the valedictorian of his graduating class at Battle Mountain High School in Vail, Colorado. He has played two years with the Cedar Rapids Rough Riders in the United States Hockey League, was a member of two NCAA National Hockey Championship teams at the University of Denver, and was captain of his team. Ted is completing a year-long internship in the Biomechanics Research Laboratory at the Steadman♦Hawkins Research Foundation and is now getting ready for his next big career challenge.

In some families, Ted's achievements would be considered exceptional. But in the family of Michael and Kathleen O'Leary, expectations were as high for Ted's older brothers and a sister as they are for him. His sister, Suzanne, graduated from Georgetown University, received her M.B.A. from the Wharton School at the University of Pennsylvania, and is now managing director for Asset Management at Goldman Sachs.



The brothers, Michael, Sean, and James, graduated from prestigious universities, two of them played college hockey, one played soccer, and all are on the O'Leary family version of the fast track to success.

"I was the youngest child, and my family has had a big influence on my life," says Ted. "They have all been very supportive, but I have some personal goals and just want to do my part."

INTERN OPPORTUNITIES

Doing his part brought him to the Steadman♦Hawkins Research Foundation as an intern in 2006. Interns who are interested in pursuing careers in the orthopaedic field have the opportunity to gain practical research experience in a variety of settings. The idea is to provide an exceptional learning environment dedicated to producing world-class researchers in the field of orthopaedic sports medicine, rehabilitation, and human performance.

HOCKEY RESEARCH

The Biomechanics Research Laboratory was establishing a research program to investigate the types and causes of hockey injuries. Ted's hockey credentials, as well as his academic background, made him a perfect match for a Steadman♦Hawkins Research Foundation internship. He has been working 40 hours a week for the past year, at first spending most of his time helping put together a hockey research facility at the Foundation. Now more of his efforts involve preparing, collecting, and analyzing information for the department's growing hockey injury database.

"One of the Foundation's first investigations will look at the slap shot because it

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is a high-profile element of hockey and because the movement is similar to that of the golf swing, which the Foundation has been studying for some time," explains O'Leary. "Dr. Marc Philippon and Dr. Michael Torry also want to study the starting and accelerating phases of skating." Groin injuries are the number one reason for missed games and the Steadman-Hawkins team suspects that these movements are the cause. They will use a three-dimensional motion-tracking system and force plates to determine the downward, forward, and lateral forces that go onto the ice, as well as in the opposite direction into the body.

Ted's talents are apparent to those who work with him. "Poised, composed, mature, dedicated, and intelligent," says Dr. Torry. "These are just a few words that I use to describe Ted O'Leary. My only regret is that Teddy is smart enough to move on from here quickly. Fortunately, he has decided to go to medical school. Ted is already an established leader and he will be a great MD, as well."

FIRST IMPRESSIONS

When he arrived in Vail to begin his internship, O'Leary was quickly impressed with the atmosphere at the Foundation and the Clinic. "During the first week, I had discussions with Dr. Steadman and Dr. Philippon. They took time to talk with a new intern, and I don't think that happens in a lot of places. The entire Foundation staff, including Dr. Torry, who directs the work of the Biomechanics Research Lab, made me feel like I was a partner instead of an inexperienced underling."

Although Ted has been a member of the Steadman-Hawkins team for less than a year, he fully understands the Foundation's mission. "We see many elite and professional athletes, but the true mission of the Foundation is to keep active people active. The information obtained for the database on a variety of hockey players will enable the Foundation to develop efficient and safe coaching techniques and protect players from injuries at the grass-roots level, says Dr. Torry." Take a good look at Ted O'Leary while you can. He's a moving target who has applied for medical school and who may soon be on another fast track to become an orthopaedic surgeon. Given his record so far, he's likely to reach that goal sooner rather than later.



SPORTS & WELLNESS

Preparation for Summer Sports

By Brooke Magstadt

Editor's note: Brooke Magstadt is an outpatient orthopaedic and sports physical therapist at Howard Head Sports Medicine Center in Vail, Colorado.

Summer is just around the corner, which means that bicycles and running shoes are replacing snowshoes and ski boots. Although you may be in great shape for downhill skiing, there are always things you can do to aid the transition from winter to summer activities. Jumping into a new activity too quickly doesn't allow your body

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Dr. Michael Torry on Ted O'Leary

Dr. Michael Torry, director of the Biomechanical Research Laboratory at the Steadman♦Hawkins Research Foundation, used the words *poise*, *composure*, *maturity*, *dedication*, and *intelligence* to describe intern Ted O'Leary. Below are some other Dr. Torry comments regarding Ted, his accomplishments, and his future.

"Those words (above) probably sound familiar to Ted, as he has no doubt heard them from every coach he's had since he put on skates and started playing hockey. Ted is one of those rare individuals who, at a young age, has attained great successes and experiences in his life through his athletic abilities.

"However, it is more important to keep in mind that while also being co-captain of a high-profile hockey team, he graduated in biological sciences in just three years with a 3.85 GPA. While still playing out his final year of NCAA hockey eligibility, he could have elected an academically easy fourth year with a padded class schedule. Instead, he chose to enroll and complete his M.B.A. during that year.

"Suffice to say that because of the level of education, coupled with the pressures of high-profile athletics that Ted has experienced, I had no doubt he could lead a research program dedicated to hockey. I hold him to a pretty high scientific standard, but he can handle it. Solve complex mathematical equations — no problem. Work on high level engineering programs — a breeze. Speak eloquently on NBC's *Today Show* about hockey research — a piece of cake. So when you hear about Steadman-Hawkins Foundation hockey research program, it is falling squarely on Ted's shoulders.

"As I stated in the accompanying article, my only regret is that Ted is smart enough to move on from here quickly. He has decided to go to medical school and that is good for all of us."

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to adjust to the unfamiliar movements, which can result in injury. Taking the proper steps to ensure that your body is prepared for summer activities will prevent injuries, as well as make them more enjoyable. By following a routine that includes stretching, lower-extremity strengthening, plyometric training, core strengthening, and balance work, the chance of aches and pains is diminished.

Warming up is an important part of preparation for any activity and frequently the most overlooked. A five- to ten-minute low-impact warm-up is strongly recommended before stretching. A good warm-up should consist of an activity that raises your heart rate and warms your muscles, whether it's jumping jacks, a brisk walk, or a short jog.

Time should also be dedicated to stretching your muscles before diving into your summer activities. Many common injuries result from a lack of flexibility and chronic overuse, and stretching can counteract the occurrence of these types of injuries. Muscles in the lower body that should be emphasized in a stretching regimen include the calves, hamstrings, quadriceps, iliotibial (IT) band, hip flexors, and hip adductors. Each stretch should be performed three times and held for 30-60 seconds in a controlled position (no bouncing).

Strength training is vital as you prepare for a new activity. It aids in the development of speed as well as injury prevention. Strength and muscular stamina can also help increase endurance and provide more complete muscular control. Common exercises that increase general leg strength include single and double leg squats, hamstring curls, and calf raises. Less familiar exercises that isolate the hip adductors, abductors, and flexors are also important. Lower-body exercises can be executed by utilizing body weight, weight machines, or sport cords for resistance.

Plyometric exercises can also be incorporated into any strength-training program. Plyometrics help to train the body's rebound response and are especially important in sports such as soccer and trail running. Examples of plyometric exercises include forward and backward running (with sport cord resistance) and side-to-side jumps. Start with low-intensity drills twice a week and increase the intensity as your body adjusts to the workouts. Discontinue

any exercise that causes pain and consult with your doctor or physical therapist if this pain persists.

Balance and core training are an often overlooked but valuable aspect of any training program. Good core strength provides a stable base for our arms and legs. A strong core results in good coordination and balance, which makes us more efficient and precise. Core strength can be improved by focusing on abdominal work. This can be done with a Swiss ball or with Pilates exercises. A simple way to improve balance is to start by balancing on one leg (place your hand on a chair or table for support if needed). To make this exercise more difficult, try turning your head from side to side, toss a ball to a partner, or try closing your eyes. For more challenging balance work, do the same exercises on an unstable surface, such as a pillow.

When beginning a training program, give your body ample time to adjust to the new movements and muscles being used. Instead of diving in head first, gradually increase the intensity and frequency of the program. With a well-rounded pre-summer training regimen that includes stretching, lower-extremity strengthening, plyometrics, core strengthening, and balance work, you'll be on your way to a successful transition between your winter and summer activities. Enjoy the weather and have fun!



Gatorade Sports Science Institute: Hydration for Improving Warm Weather Workouts

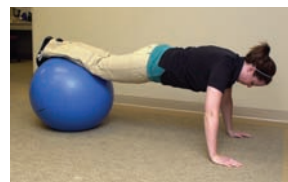
Exercisers who work out in warm weather or in a hot gym risk dehydration. The risk becomes greater the longer the workout lasts, or when there is more than one workout in a day. Here's how to prevent dehydration and get the most mileage out of a general fitness routine:

Remember fluids throughout the day. This may be as simple as grabbing a sports drink first thing in the morning, then using fountains, coolers, and cafeteria beverages as triggers for drinking throughout the day. Hydrate two to three hours before exercise. Active people should aim for at least 16 ounces (2 cups) of fluid at this time and an additional 8 ounces (1 cup) 10 to 20 minutes prior to exercising.

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Core Hamstring Curl



Core Push-up on Ball



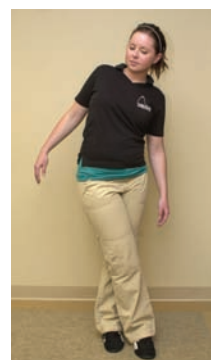
Core Push-up on Ball



Wall Sits with Swiss Ball



Hip Stretch



Band Stretch



photo: John Kelly

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DRINK DURING WORKOUTS.

Sports drinks can help ward off dehydration and muscle cramps because they help replenish both fluid and electrolytes (sodium and potassium) lost in sweat without overdrinking. However, for active people who prefer to drink plain water, a fitness water may be a better option. Fitness waters are lightly flavored to help exercisers drink more than they would of plain water, thus staying better hydrated.

KNOW YOUR SWEAT RATE.

Since sweat rates can vary based on the individual, weather, and intensity of exercise, athletes and exercisers should determine the amount of fluids they should consume to replace sweat losses by using this formula:

$$\begin{array}{r}
 \text{Weight lost during exercise (in ounces)} \\
 + \\
 \text{Fluid consumed during exercise (in fluid ounces)} \\
 = \\
 \text{The amount one should drink to replace sweat losses}
 \end{array}$$

CONSIDER CARBOHYDRATES.

Many exercisers are hesitant to use sports drinks during a workout, not wanting to take in extra calories. However, recent research has shown that consuming some carbohydrates by drinking a sports drink during a workout can limit calorie intake throughout the rest of the day.



FREQUENTLY ASKED QUESTIONS

WHAT DISTINGUISHES THE STEADMAN♦HAWKINS RESEARCH FOUNDATION FROM OTHER RESEARCH ORGANIZATIONS?

Compared to university research programs, the Foundation’s overhead is much lower, in some cases less than half of that of other institutions. Because of the low overhead and flat organizational structure, decisions regarding research and the allocation of resources can be made quickly and efficiently. Researchers can address medically relevant questions on a daily basis and adjust midstream as needed.

The Foundation is the most published orthopaedic sports medicine research institute in the world. At the American Academy of Orthopaedic Surgeons annual meeting earlier this year, seven research papers on the hip were accepted for presentation and five of those studies were produced by the Foundation.

During a recent three-year period, the Foundation tracked its number of publications in the three leading medical journals in orthopaedic sports medicine and compared the results to four other top academic programs. The Foundation ranked first, ahead of the Cleveland Clinic, the Hospital for Special Surgery in New York City, the University of Pittsburgh, and Methodist Sports Medicine in Indianapolis.

WHAT IS EVIDENCED-BASED MEDICINE AND HOW IS IT BEING DEVELOPED AT THE FOUNDATION?

“Evidence-based medicine is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients. The practice of evidence-based medicine means integrating individual clinical expertise with the best available external clinical evidence from systematic research. By best available external clinical evidence, we mean clinically relevant research. This new information often comes from the basic sciences of medicine, but especially from patient-centered research into diagnostic tests, markers (indicators) of conditions and diseases, and the effectiveness and safety of therapeutic, rehabilitative, and preventive programs.” (Reference: Evidence-Based Medicine: What It Is and What It Isn’t. David L Sackett, William MC Rosenberg, JA Muir Gray, R Brian Haynes, W Scott Richardson; Oxford Centre for Evidence-Based Medicine.)

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Since 1993, the Foundation has entered the records of every patient seen at Steadman-Hawkins into a massive database. Approximately 450 pieces of information, objective and subjective, exist on every patient. Patient outcomes are tracked 5-10 years after surgery. The goal is to monitor progress over a number of years to determine how long patients experienced continued improvement and whether they required additional surgery. The evidence-based information related to patient outcomes is made available to physicians around the world through presentations, consultations, and publications, contributing to their continuing medical education.

HOW DO SURGEONS GET ACCEPTED INTO THE FELLOWSHIP PROGRAM?

Every year, on average, approximately 600 surgeons graduate from orthopaedic residency programs in the United States. These surgeons become board certified and are ready to enter practice. A select few elect to continue their education for one more year in a fellowship program such as the one offered at Steadman-Hawkins. Last year more than 160 applications were received by the Foundation from young surgeons around the world. After interviews and presentations, six were selected by the screening committee.

IS THERE A TAX BENEFIT FOR CONTRIBUTING TO THE STEADMAN♦HAWKINS RESEARCH FOUNDATION?

Yes, the Foundation is a tax-exempt, non-profit, charitable organization under section 501 (c) (3) of the IRS tax code. Contributions to the Foundation are deductible to the donor as allowed by law. For further information on tax-exempt organizations, please speak to a tax or financial advisor.



Save the Date

STEADMAN-HAWKINS SANCTUARY GOLF TOURNAMENT SET FOR AUGUST 16, 2007

The Steadman♦Hawkins Research Foundation is pleased to announce the *Pepsi 2007 Steadman-Hawkins Golf Classic, presented by RE/MAX International* at the Sanctuary Golf Course, a premier golf resort located south of Denver near Sedalia. Proceeds from the fourth annual tournament will support the development of new



Spectacular Sanctuary!

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 and has previously included invitees from the Denver Broncos, local celebrities, and Colorado golf pros. Sanctuary organizes and hosts charitable events to support organizations devoted to the arts, children, health care, and crisis management. To date, more than 185 charities have raised more than 34 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) under "Upcoming Events," or by calling the Development office at (970) 479-5809 or (970) 479-5788.

To request an invitation or for more information on other upcoming Foundation events, please contact Rachele Palmer at the Steadman♦Hawkins Research Foundation (970-479-5809).



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 and enter Affinity Member Code: FOUNDATION. There is no expiration date. Share the code! Shop and enjoy.

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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Greta Campanale
Coordinator

VISUAL SERVICES

Joe Kania
Coordinator

Mark Your Calendar:

AUGUST 16

**Pepsi 2007 Steadman-Hawkins Golf Classic,
presented by RE/MAX International at
Sanctuary in Sedalia, Colorado**

For more information, contact Rachele Palmer
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**Your Legacy, Our Future. Please remember Steadman♦
Hawkins Research Foundation in your will, trust, or
other estate plan.**



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