Team Players
Hospital for Special Surgery’s sports medicine professionals oversee care for competitive athletes and teams in virtually every sport.

Middle: Brandon Jacobs, New York Giants
Clockwise, from the top: Devin Harris, Nets Basketball; Sarah Bates Johnson, US Rowing Team; Andy Roddick, ATP; Wilson Chandler, New York Knicks; Seth Stammler, New York Red Bulls; Adenike Oyesile, St. Peter’s College; Richard Kiplagat, Iona College; and Michael Phelps, USA Swimming team

Success in Sports – and Sports Medicine
William R. Salomon: Thoughtful Giving with a Charitable Lead Trust

In the 1970s William R. Salomon decided that he had been suffering too long with hip pain. Knowing that hip replacement surgery could be the answer, he sought to find an orthopedic surgeon who didn’t think that at age 60 he was too young for the procedure. He found that physician in Philip D. Wilson, Jr., MD, then Surgeon-in-Chief of Hospital for Special Surgery. At that time, hip replacement in the United States was still very new, and surgeons were reluctant to perform the procedure in someone of their ages. But Dr. Wilson and his colleagues at HSS were at the forefront of hip replacement surgery, having traveled to England to learn from Sir John Charnley, the “father of modern total hip replacement,” who had originated the procedure in the early 1960s.

“My wife, Virginia, happened to be at the Hospital seeing Dr. Lee Ramsay Shub, and he saw me limping away,” recalls Mr. Solomon. “He said to Virginia, ‘Why don’t Billy have that repaired?’ and she said, ‘He would love to.’ So he sent me to Dr. Wilson, and I had the operation. Obviously it was quite successful.” Mr. Solomon’s new hip served him well for 25 years before he needed revision surgery – performed at HSS by Douglas E. Padgett, MD, a protégé of Dr. Wilson.

Wanting to do something for the Hospital, Mr. Solomon, Honorary Chairman of Citigroup and former Managing Partner at Salomon Brothers, Inc., recalls, “Dr. Wilson asked me if I would be interested in going on the Board and I said I would love to.” Mr. Solomon became a member of the Board of Trustees in 1979, with he and his wife becoming among the Hospital’s most generous and devoted benefactors.

The Salomons established the Virginia F. and William R. Salomon Rehabilitation Endowment Fund to support the work of the Rehabilitation and Recovery Department at HSS. “All the people that I have come in contact with here over the years are enthusiastic about what they are doing and there is a warmth about the Hospital that is quite unusual in this day and age. I think more people who have a serious operation there would somehow or another like to become involved. I’ve enjoyed the privilege.”

If you would like more information on planned giving opportunities, please contact Rachel Cusano, Associate Director, Planned Giving, at 212.774.7252.
On October 1, 2008, Johan Santana – the New York Mets ace left-hander pitcher – underwent successful arthroscopic surgery at Hospital for Special Surgery by the team’s Medical Director David W. Altchek, MD, and Head Team Physician Struan H. Coleman, MD, PhD, to repair his torn meniscus. The meniscus is the cartilage between the moving surfaces of the knee. Along with knee ligaments, the meniscus contributes to knee stability. Remarkably, Santana had pitched the season’s final month with the injury, and few people knew he had been doing so with pain in his push-off leg. “I didn’t think the knee was that serious because I was able to pitch with it, but, of course you never know,” said Santana. “There is always the anxiety of having surgery and how you are going to come out of it, but one of my agents told me how good HSS is. Dr. Altchek put me at ease from the very beginning. He told me what rehab I would have to do to get back to be ready for spring training. He gave me a lot of confidence that I wouldn’t have any problems at all this year. All the doctors I’ve met have a deep understanding of what an athlete needs to do to get ready.”

Less than five months later, and a few weeks away from his 30th birthday, Santana arrived at spring training in Port St. Lucie, Florida for his second season with the Mets, “looking limber and fit – in better shape than pitchers six or seven years younger,” reported the Associated Press.
David Altchek, MD, is no ordinary fan when he is watching Johan Santana throw out the first pitch at a New York Mets game. During the past 17 years, Dr. Altchek has served as a Team Physician and most recently as Medical Director for the New York Mets. Dr. Altchek, along with his colleague Scott A. Rodeo, MD, Associate Team Physician for the New York Giants, are Co-Chiefs of Hospital for Special Surgery’s Sports Medicine and Shoulder Service – one of the largest sports medicine departments in the country.

Together with some 40 orthopedic surgeons, primary care physicians, and rehabilitation professionals, they provide the very best care to athletes, whether their injury was sustained during a major league game, on a Little League field, or on a driveway while shooting a few hoops. In fact, the hallmark of Special Surgery’s sports medicine physicians and health professionals is that injured athletes – at any level of talent – are patients first, all comparable when it comes to care in the exam room.

“You might do some things differently for the pro footballer whose livelihood is the game than you would for the 16-year-old high school student,” says Dr. Rodeo. “You might let the pro take more chances as long as it’s an informed decision. Nuances come into play with athletes at that level. However, with all of that being said, you are still treating the athlete. Their health is the most important thing. You have to divorce yourself from the excitement of the event and ask, ‘what is the best thing for my patient?’”

Treating champion competitors also provides the Hospital’s sports medicine professionals with incredible insight into injuries and recovery potential. “You learn a lot by treating elite athletes because they have incredible motivation to get better,” says Dr. Rodeo. “These are the athletes who are going to push the limits – of your surgery, of your rehabilitation. For them, good is often not good enough. You need to be very, very good to allow these athletes to get back to high demand performance. By learning how we can maximize outcomes in the pro athlete, we can then translate that to our recreational athletes.”

The camaraderie and team effort that Drs. Altchek, Rodeo, and their colleagues find among athletes on competitive teams also defines their own relationships on the Sports Medicine and Shoulder Service. “We have a lot of talented men and women on the Service, and our goal is to make sure that everybody is harnessing their potential in clinical practice, in the lab, and in collaboration with each other,” says Dr. Altchek. “We spend a lot of time together – in meetings, in the ORs, while seeing patients. It’s rare to find this level of interaction in other institutions.”

Covering All Bases
“Last year our physicians provided care and consultation to professional and elite athletes in some 3,000 instances – whether it be pre-season evaluations, on-site visits to our offices, or on the sidelines of games,” says Thomas P. Sculco, MD, Surgeon-in-Chief. “The Hospital is a premier institution for sports medicine because we have a group that is focused on all aspects of
the care of sports injuries. This begins in the laboratory, where we are trying to define how tendons heal and how traumatic events to soft tissues can be addressed surgically with better outcomes. Since we see more musculoskeletal patients than any other place in the world, we have acquired a tremendous amount of information on the outcomes of surgeries for sports-related injuries, which we can use to improve techniques. Physicians also come here from around the world to be educated in procedures that we’ve developed and then they return to their homelands to improve care globally.”

“In many ways sports medicine was born at Special Surgery,” adds Stephen A. Paget, MD, Physician-in-Chief and Chief of Rheumatology. “And the field has been brought to the highest level in the world by the experience of our doctors and their integration of science into care. That is what an academic institution is all about. That’s really what makes us the best.”

The Evolution of Sports Medicine
Russell F. Warren, MD, HSS Surgeon-in-Chief Emeritus, came to sports medicine when the field was in its infancy. A star athlete in both football and baseball while a student at Columbia University, Dr. Warren was all too aware of the potential for getting hurt. “Sports medicine as a specialty was just getting started. I had a lot of injuries. I thought the care could be better, and I thought I could do something about that.”

In 1977, Dr. Warren joined Special Surgery, working alongside John Marshall, MD, a pioneer in sports medicine, who had recently started a sports medicine clinic at HSS. He had just returned from fellowship training under the world-renowned shoulder surgeon, Charles S. Neer, MD, who had, in fact, operated on Dr. Warren’s shoulder. With Dr. Marshall’s death in 1980, Dr. Warren became the only physician on the Service. Soon he was joined by Thomas L. Wickiewicz, MD, Stephen J. O’Brien, MD, David W. Altchek, MD, Scott A. Rodeo, MD, and Jo A. Hannafin, MD, PhD.

At the same time Dr. Warren was expanding the now combined Sports Medicine and Shoulder Service, he was very interested in having a research basis on which to provide better clinical care. He began to develop what is today a major laboratory for soft tissue research with clinicians and scientists seeking a better understanding of how tendons and ligaments work, looking at how cells can be manipulated to promote healing, and determining what you might do to replace them.

Sports Injury Areas of the Knee and Shoulder
The anterior cruciate ligament, one of four major ligaments in the knee, has a primary role in maintaining knee stability. The rotator cuff is a complex of four muscles and tendons in the shoulder that provide stability to the ball-and-socket joint. Injuries to these soft tissues are the most prevalent among athletes across all types of sports and helping them to heal is a major focus of HSS clinicians.

Shortly thereafter, the Service established a sports medicine fellowship training program. Unique in its approach, the fellowship required physicians to divide their time between the laboratory and the operating room. This combination of science and medicine became the fellowship’s trademark, making it one of the most sought after in the country.

Today, the Service has seven accredited sports medicine fellowship positions, an international fellow, and offers a two-year fellowship position with a dedicated research year. Dr. Thomas Wickiewicz organized and leads a weekly CORE Series covering major sports medicine conditions; HSS orthopedic surgeon Sabrina M. Strickland, MD, is Chief of Orthopedics at the Bronx Veteran’s Affairs Medical Center, responsible for the education and supervision of Special Surgery residents who rotate there; and Anne M. Kelly, MD, chairs the Hospital’s Medical Students Advisory Committee. “On Mondays and Tuesdays, we hold a Fellows Conference, and on Thursday mornings, we hold the CORE conferences that involve residents, fellows, and physical therapists,” says Dr. Kelly.
Our Professional Teams

The Hospital’s Sports Medicine and Shoulder Service works with teams and individuals in virtually every sport – from baseball to basketball, football to soccer, swimming to tennis, golf, rowing, and cricket.

Team physicians from HSS have been present at Super Bowl championships and Olympic victories. To the physicians and therapists of Special Surgery, it really is ‘how you play the game,’ making sure the athlete, if injured, is optimally treated, rehabilitated, and physically ready to return to his or her sport.

An impressive group of professional sports teams and organizations have partnered with Hospital for Special Surgery for care of their athletes. Among them are the New York Mets, the New York Football Giants, the New York Knicks, the New York Liberty, Nets Basketball, and the New York Red Bulls.

New York Giants
Russell F. Warren, MD
Team Physician
Scott A. Rodeo, MD
Associate Team Physician
Bryan T. Kelly, MD
Associate Team Physician
Brandon Jacobs
Running Back

New York Liberty
Lisa R. Callahan, MD
Director, Player Care
Jo A. Hannafin, MD
Team Physician
Ashley Battle
Forward

Nets Basketball
David W. Altchek, MD
Medical Director
Riley J. Williams III, MD
Head Team Physician
Devin Harris
Guard
New York

Knicks

Lisa R. Callahan, MD  
Director, Player Care

Answorth A. Allen, MD  
Team Orthopedist

Wilson Chandler  
Forward

New York

Red Bulls

Riley J. Williams III, MD  
Team Physician and Medical Director

Juan Pablo Angel  
Forward

New York

Mets

David W. Altchek, MD  
Medical Director

Struan H. Coleman, MD, PhD  
Head Team Physician

Andrew D. Pearle, MD  
Associate Team Physician

David Wright  
Third Baseman
“Our educational programs address everything from caring for knee and shoulder injuries to intraoperative decision-making, and even practice management issues.”

As sports medicine began to evolve, arthroscopy for the knee was also coming into its own. In 1985, Dr. Warren and his colleagues began doing reconstruction of the anterior cruciate ligament (ACL) arthroscopically, rapidly adding meniscus repair and transplants, as well as posterior cruciate ligament reconstruction, to their repertoire of arthroscopic procedures. “Arthroscopic applications for the shoulder came later,” notes Dr. Warren, “but today the bulk of shoulder procedures we do in the athlete are done arthroscopically.”

Going to the Source
As so many of the Hospital’s sports medicine physicians are athletes themselves, they know full well the value of applying their expertise to taking care of teams, while at the same time gaining greater insight into the causes of sports-related injuries by watching players in action. In the 1980s, Ronnie P. Barnes, MS, ATC, Vice President of Medical Services for the New York Giants, who was then the organization’s head athletic trainer, asked Dr. Warren to work with the Giants, thus launching Special Surgery’s relationship with pro teams. As word of mouth spread about the expertise HSS could offer athletes, other major league teams followed suit, as did many college athletics departments, requesting the Hospital’s sports specialists to “join” their teams.

Continuing a Tradition of Excellence
Stephen J. O’Brien, MD, MBA, who joined HSS in 1982, had been an athlete both in high school and at Harvard University, where he played football and baseball. “I was always interested in sports medicine, and I was very excited to see that HSS actually had a clinic for that,” says Dr. O’Brien. “I was so inspired by Russ’s enthusiasm and his vision for the field that I changed my career to be part of it. I’ve now been at HSS for 26 years. I was very blessed to be able to be on the ground floor of a tremendous tradition and history. We’re all very proud of it.”

The Sports Medicine and Shoulder Service has many reasons to be proud. Its leadership, beginning with Dr. Warren, followed by Dr. Wickiewicz, who served as Chief of the Service from 1993 to 2005, and today with Drs. Altchek and Rodeo, continues to push the envelope and encourage each member of the Service to engage in all levels of research to improve patient outcomes.

“I think we’ve been made better as an institution because we have a global experience across many professional sports,” says Dr. Rodeo. “At the end of the day, we want to translate all that we have learned into providing the best quality of care for any person who walks through our doors.”

The care that Hospital for Special Surgery provides to athletes is the focus of this issue of Horizon. ACL and shoulder injuries are among the most frequent injuries occurring in nearly every sport. In the sections that follow, you will learn more about these injuries and why athletes of all levels come to HSS for care.

Dr. Jo Hannafin, who was a three-time gold medalist at the U.S. National Rowing Championships, performs a shoulder arthroscopy. As an athlete, Dr. Hannafin fully understands the impact sports injuries can have on soft tissues.
1. The Professional Athlete
The Red Bulls will play their first-round MLS Cup matchup with Houston without Seth Stammler. The midfielder had surgery last night at the Hospital for Special Surgery to repair a torn lateral meniscus in his right knee.

– Blogs.NYPost.com, October 31, 2008

When a professional athlete is injured and sidelined for any period of time, the consequences can be devastating to his or her career, as well as to the team on which they play. No one knows this better than the team physicians of these major league organizations, who are often at the crux of decisions regarding the careers of professional athletes. “The expectation for recovery for athletes is massive,” says Riley J. Williams, III, MD, who serves as Head Team Physician for Nets Basketball, the New York Red Bulls, and the Iona College Department of Athletics.

“The football field provides a tremendous learning environment,” says Dr. Scott Rodeo. “By being at the game, you see injuries in the moment, and you can evaluate them right then and there.”

In the nearly two decades that Dr. David Altchek and his colleagues have been caring for the Mets, they have gained tremendous experience with ‘throwing’ athletes. “We tend to see their injuries evolve over time. They are almost always microtraumatic,” says Dr. Altchek. “What’s fascinating is when we examine a player and look at his elbow and shoulder, we see evidence of chronic changes for which you might say ‘how can he pick up a baseball?’ But these are just chronic changes that have occurred from the stresses of throwing a ball over time, and we have to differentiate those adaptive changes from actual injury. That’s the constant challenge we have.”

A Closer Look at the ACL

I saw a young woman today who said ‘I went up for a rebound, I contacted someone in the air, I came down on my leg, and I was off balance.’ It’s a classic story for tearing an ACL. – Dr. Jo A. Hannafin, Team Physician, New York Liberty

ACL tears usually occur when an athlete stops suddenly and changes direction as when running, pivoting, or landing after a jump – especially in the female athlete.

“If you watch women play basketball compared to men, they land differently,” notes Lisa R. Callahan, MD, Co-director of the Hospital’s Women’s Sports Medicine Center, and Director of Player Care for the New York Knicks and New York Liberty basketball teams. “They don’t go down with a deep crouch, but are more likely to land with a straighter knee, which may contribute to a greater frequency of ACL injuries.”
Orthopedic surgeon Beth E. Shubin Stein, MD, agrees, having seen similar issues in professional female soccer players. “ACL injuries are actually four to nine times more common in women.” According to Dr. Shubin Stein, women soccer players turn and pivot with much more of an upright posture and less bend in their knee than men. It is the bend in the knee that protects the men from these high risk, high impact injuries and the straight leg that puts women at a higher risk.

“With a bent knee the muscles contract around the knee and work to protect the ACL,” explains Dr. Shubin Stein. “In a more upright position, the ACL is less shielded by the muscles so it tears more easily.” However, evidence has shown that rigorous retraining on how to land and jump dramatically reduces ACL injuries in women.

“The ACL injury is a pre-arthritic event,” says Dr. Williams. “The injury has disrupted the normal kinematics of the knee. Removing the ACL will result in increasing forces on the meniscus or the articular cartilage. The best way to prevent that damage or to mitigate it is to reconstruct the ACL.”

The most common corrective procedure for severe ACL injuries is reconstructive surgery – a procedure that HSS surgeons have been performing, evaluating, and refining for decades. Because the ACL cannot be reattached once it is torn, surgical reconstruction requires the grafting of replacement tissue in its place.

“We have worked very hard to understand the weaknesses of ACL reconstruction and how we could improve the procedure,” says Dr. Altchek. “The challenge in recent years was to find a way to reproduce the normal functioning of the knee.”

In the traditional arthroscopic operation, a tunnel is drilled in the tibia to gain access into the knee for insertion of the ACL graft. But, explains Dr. Altchek, in a small subset of patients with this approach the repaired knee was not as stable as a normal knee.

“We realized that in order to better replicate the anatomy, we would have to reach the femur in a different way,” says Dr. Altchek. The solution was to approach the femur from the front of the knee, allowing the surgeon to control the positioning of the graft. Clinical and biomechanics studies are ongoing at HSS to determine optimal femoral tunnel placement.

According to Jo A. Hannafin, MD, PhD, Co-director of the Women’s Sports Medicine Center, who is Team Physician to the U.S. Rowing Team and to the New York Liberty women’s basketball team, recovery from an ACL injury or reconstruction is different for every athlete. “It is based on the sport, the athlete, their mechanics, and how quickly they get their strength back,” says Dr. Hannafin. “You want to make sure that the patient has a functional knee, and a functional knee is very different in a 6’2” 170 pound professional female basketball player.”

Understanding Shoulder Injuries

“Athletes in collision sports have higher velocity impact injuries to their shoulders in contrast to throwing athletes who experience repetitive stresses,” says Dr. Russell Warren. “These
extreme impacts can cause injury of shoulder cartilage, shoulder dislocation, and extensive rotator cuff injuries.”

In throwing athletes, rotator cuff problems often begin with the ligaments in the shoulder becoming stretched from overuse. This allows the shoulder a greater range of movement in the socket, causing instability. This instability puts greater tension on the rotator cuff and can result in impingement and partial or complete tears.

Rotator cuff repair is performed with arthroscopy in order to visualize the inside of the shoulder and correct the bone and tendon problems without damaging associated muscles. “Arthroscopy is particularly useful for throwers,” says Dr. Warren. “It decreases trauma to the shoulder and avoids chronic loss of joint motion, allowing them to regain throwing velocity to a greater degree.”

Many of the Hospital’s sports medicine specialists have extensive expertise with shoulder injuries. The father-son team of David M. Dines, MD, and Joshua S. Dines, MD, serve the professional tennis community. Dr. David Dines, a renowned shoulder surgeon, has just been renamed Medical Director of the ATP Worldwide Tennis Tour for 2009 – 2010 for men’s professional tennis. His son, Josh, Assistant Team Physician for the United States Davis Cup Tennis Team, pursues research on tendon injuries. Howard A. Rose, MD, performs the latest arthroscopic procedures for rotator cuff repairs and shoulder stabilizations. He is a former Assistant Team Physician for Harvard University Athletics.

Frank A. Cordasco, MD, MS, has a particular expertise in treating the professional dance athlete. “Professional male dancers are at risk for shoulder injuries because they depend on both shoulder strength and function to lift their female partners,” says Dr. Cordasco, who has treated dancers from the New York City Ballet, the American Ballet Theatre, and the Paul Taylor Dance Company. “Professional dancers are a pleasure to work with because they know their bodies well and they are very motivated when it comes to treatment and rehabilitation.”

Dr. Warren and Dr. Cordasco, along with John D. MacGillivray, MD, and Edward V. Craig, MD, MPH, are leaders in the field of shoulder surgery – pioneering techniques ranging from shoulder arthroscopy to total shoulder replacement to treat complex shoulder injuries in athletes.

“Instability of the shoulder, which includes dislocations and separations, is a common injury in the professional, collegiate, and high school athlete,” says Dr. Cordasco, who also treats professional football players. “When the ligaments and labrum are torn, they do not heal on their own. The goal is to restore the anatomy by reconstructing the labrum and ligaments. Surgical reconstruction, which in most cases is performed arthroscopically, provides the optimum outcome.”

According to Dr. MacGillivray, in the past, open surgeries were used to repair shoulder separation and often involved transfer of tissue to support the joint. “These efforts met with variable outcomes and had a higher failure rate,” says Dr. MacGillivray, who serves as a Team Physician to the U.S. Ski Team. “At HSS, however, and selected institutions throughout the country, the repair is performed with arthroscopy yielding excellent results.”

Athletes who develop severe arthritis after years of chronic injuries find help with total shoulder replacement. “Total shoulder replacement is a tremendously successful procedure for treating the pain and stiffness that accompany degenerative joint disease of the shoulder joint,” says Dr. Craig. “The primary goal is pain relief, with a secondary benefit of restoring motion, strength, and function.”

**To Play or Not to Play**

Tom Coughlin announced this morning that [David] Tyree will remain on the Giants’ Reserve List. Tyree…underwent knee surgery in April and was placed on the physically unable to perform list.

– Giants.com, November 5, 2008

“One of the toughest tasks of the team physician is to bar a player from participating,” says Dr. Warren. “Usually, the athlete knows whether they are fit to play. The discussion is candid, and all concerned parties are involved.”

“Sometimes you have to make decisions in the training room, and it’s very chaotic,” says Dr. David Altchek. “The key is to slow it down, perform a thorough physical exam, consider their history, get the relevant imaging tests, and gather all the information you’ll need to make the best decision. It’s a challenging environment, but when you make the right decision, you gain the patient’s trust over time.”

During the 2008 Super Bowl, Dr. Russell Warren checks in with New York Giants linebacker Antonio Pierce. Dr. Warren and his HSS colleagues were on the sidelines closely monitoring players for potential injuries occurring during the game.
On Call at the Beijing Olympics

Olympic swimmer Michael Phelps came home with a record eight gold medals; Natalie Coughlin was the first U.S. female to win six medals at an Olympics. While orthopedic surgeon Scott A. Rodeo, MD, and athletic trainer/physical therapist John T. Cavanaugh, PT, MEd, ATC, were not there to win medals, they were very much a part of the competitive events taking place at the 2008 Summer Olympics in Beijing.

Dr. Rodeo and Mr. Cavanaugh were among a select group of healthcare professionals chosen by the U.S. Olympic Committee to protect the health of the nation’s elite athletes at the August 8-24 games.

On call or on duty 24/7 during the Games, Dr. Rodeo and Mr. Cavanaugh worked with USA athletes in all sports at the walk-in clinic in the Olympic Village. “Over the course of the month, we got to see nearly every athlete – some 600-plus – on the U.S. team,” says Dr. Rodeo, who, along with Mr. Cavanaugh, had primary responsibility for events involving the aquatic athletes, gymnasts, and track and volleyball athletes. “At times, you’re doing everything but orthopedics. The athletes come to you with every medical concern – to them, you’re just ‘Doc.’”

On the orthopedic side, taking care of the “greatest swimmers ever,” Dr. Rodeo was on the lookout for shoulder injuries, primarily, as well as knee injuries in breast stroke swimmers due to the heavily repetitive nature of competitive swimming.

A certified athletic trainer on the Olympics medical team, Mr. Cavanaugh’s role was to advise on injury prevention, to assess injuries, and take care of the injuries on the spot.

The big issue, acknowledges Dr. Rodeo, is how you get an athlete back to playing as soon as possible when they do suffer an injury. The sports medicine experts are challenged to use all their skills to address pain and injury in the moment. “These athletes are obviously on a very short time frame,” says Dr. Rodeo. “Part of our role is to treat and rehabilitate them to get them back as fast as possible, while at the same time truly knowing when someone should be disqualified or when they shouldn’t compete. That’s a big decision. Some of these injuries could be life altering.”

“We worked with a tremendous medical staff from multiple disciplines and from all corners of the country,” says Mr. Cavanaugh. “The experience was incredible.”
Healthy Goals
Osric S. King, MD, Brian C. Halpern, MD, and Lisa R. Callahan, MD, provide expertise in primary care and non-surgical management of the athlete.

“Ninety-five percent of sports medicine is non-operative,” notes Dr. Halpern. “We see sprains and strains, lower back pain, and tendonitis in the knee, elbow and Achilles tendon related to overuse.” To help address overuse syndromes, Dr. Halpern uses platelet-rich plasma therapy. “By injecting the patients’ own platelet cells, which contain growth factors, into their tendon injury, we have been able to rekindle a healing response.”

Dr. Callahan assesses the athlete for anemia, thyroid problems, depression, asthma, sleep disturbances, and other medical concerns. “All of the issues that might affect an athlete affect people day to day, but if athletes lose their edge, their performance and the team’s performance can really suffer,” says Dr. Callahan.

A View from Within
Hollis G. Potter, MD, Chief of Magnetic Resonance Imaging, has been a major participant in the development of imaging capabilities in orthopedics, particularly for sports-related injuries.

“MRI has become an invaluable tool in evaluating tendons and ligaments, and more recently to ascertain the degree of traumatic or degenerative injury to articular cartilage,” says Dr. Potter.

According to Dr. Potter, the ability to image cartilage has changed their ability to diagnose sports injuries. “Athletes put so many abnormal stresses on the joint that unfortunately a lot of them develop early arthritis,” notes Dr. Potter. “MRI provides an objective look at cartilage and the severity of joint damage, providing us with some ability to predict function.”

Transfer of Knowledge
Each and every member of the Hospital’s Sports Medicine and Shoulder Service universally agree that working with the professional athlete provides them with a perspective on treatment, rehabilitation, and recovery that is an important part of how they develop clinical protocols and assess outcomes for the benefit of all their patients. “With professional athletes, the expectations for recovery are greater,” says Answorth A. Allen, MD, Team Orthopedist to the New York Knicks and Medical Director for St. John’s University. “This challenges us to do even better. The way I treat the professional athlete is the way I treat all my patients. You bring the breadth of all your years of experience to each individual case.”

“Our nearly two decade involvement with the Hospital has been a very successful one,” says Ronnie Barnes, Vice President of Medical Services, New York Giants. “The athletes at the New York Giants are very fortunate to have this great team in our backyard. Hundreds of people call our office annually looking to receive the same care as the New York Giants. We immediately refer them to Hospital for Special Surgery.”

Extending Our Reach
With patients traveling longer distances to come see the Hospital’s sports medicine specialists, it became clear that establishing affiliate physician offices in the community would be of great benefit. Nearly 10 years ago, Dr. Stephen O’Brien helped open HSS’ first Affiliate Physician Office in Uniondale, Long Island. Additional offices opened in Greenwich, Connecticut, and Princeton, New Jersey. “These off-site offices give us an opportunity to provide the same expert level of care patients receive at the Hospital closer to home,” says Dr. Anne Kelly, who also sees patients in the Uniondale office.

HSS physicians are also bringing their musculoskeletal expertise to Wall Street. Stephen Fealy, MD, orthopedic surgeon, Jennifer L. Solomon, MD, physiatrist, and Arthur M. Yee, MD, PhD, rheumatologist, travel to Merrill Lynch weekly to see employees on-site. Dr. Fealy and Christopher Lutz, MD, physiatrist, also attend to employees at Goldman Sachs.

Dr. Riley Williams, Head Team Physician, Nets Basketball, evaluates the progress of Nets forward Jarvis Hayes at HSS.
Richard Kiplagat
Graduate
Iona College
As a sophomore on the women's basketball team of St. Peter's College, Shatira Miller, a forward, played in 26 out of 30 games, defending some of the conference's best players. The following season, she was limited to action in just two games due to knee injuries.– Stephanie DeWolfe, Head Coach, Women's Basketball, St. Peter's College

As a physiatrist at HSS, Joseph H. Feinberg, MD, has specialized expertise in peripheral nerve injuries in the athlete. He has been a Team Physician at St. Peter's College in New Jersey since 1992, and currently is the Head Team Physician there.

In the 26 years since Thomas L. Wickiewicz, MD, joined Special Surgery as one of the original orthopedic surgeons in the Sports Medicine and Shoulder Service, he served as Chief of the Service for 12 years and spent eight years as Assistant Team Physician for the New York Giants. He now serves as the Team Orthopedic Surgeon for all Division 1-AA College sports at St. Peter's.

For over a decade, Michael J. Maynard, MD, has been Team Physician for thousands of athletes at Marist and Vassar Colleges.

“At HSS, we see a pyramid of athletic ability from the school-aged athlete to the professional athlete,” says Dr. Wickiewicz. “When you’re working with the pro athlete, you’re caring for someone who is about as good as you can be for that particular sport. But when you’re taking care of a collegiate team, you’re working with a spectrum of athletes who are going to vary in physical size and ability. However, sports are every bit as important to them. You manage their injuries and their training very similarly to the way you would for the pro athlete.”

According to Dr. Wickiewicz, studies that have looked at re-injury in athletes across the board – from school level to professional – who have undergone surgery for either a shoulder instability or an ACL tear have found a pretty significant rate of re-injury in the school athlete as compared to athletes playing in the majors. Why does the pro athlete get hurt so much less frequently? “It’s because pro athletes have a different biological make-up,” explains Dr. Wickiewicz. “Their motivation, pain response, and muscular control are different. Despite these differences, the goal of the sports medicine specialist is to get athletes of every level back to participation – whether they are senescent or prepubescent – but also to provide them with realistic expectations about what the injury means for their future in sports.”

High Hopes
As a seventh grader, Daniel Kadden participated in wrestling, lacrosse, and basketball. But in the summer before eighth grade, while wrestling for fun with some friends at camp, Daniel ended up at the bottom of a pile. “My arm winged out and I heard something in my shoulder tear,” recalls Daniel.

It wasn’t until a few weeks later that Daniel learned how bad his injury was. “From the MRI, the doctors said one of his rotator cuff tendons was badly torn,” says his mother, Freddi Kadden. The family was told by surgeons locally that the tendon could be repaired with open surgery through a large incision, but Mrs. Kadden was reluctant to have Daniel undergo such a major operation. At Hospital for Special Surgery, Struan H. Coleman, MD, PhD, was able to provide Daniel with the option of repairing the tear using the minimally invasive procedure of arthroscopy.

Daniel underwent the procedure with Dr. Coleman on August 19. “We were able to bring him home that night,” says Mrs. Kadden. After six weeks in a sling to allow the tendon to heal, Daniel had physical therapy for another 10 weeks.

“As of now I can shoot a basketball perfectly just like I did before,” says Daniel. “I can jump up for a rebound just like before. Everything is going back to normal.”

Daniel Kadden (below) was given the go-head by Dr. Struan Coleman (at right) to return to play with his school lacrosse team after recovering from a rotator cuff repair.
“The results were fabulous,” says Mrs. Kadden. “I told Dr. Coleman that you are so nice, and we don’t ever want to have to use you again, but if anyone in my family has a problem... you are our doctor for life!”

“Taking care of baseball players has helped me to better understand the mechanics of the shoulder,” says Dr. Coleman, who is the Head Team Physician for the New York Mets. “This knowledge not only benefits professional athletes, but athletes at any level with shoulder injuries.”

Playing it Safe

“We’ve seen some real fundamental changes in the way youth sports have been conducted in the past 10 to 15 years,” says Jordan D. Metzl, MD, a primary care sports medicine physician at HSS. “We now spend as much time taking care of female athletes as male athletes in the high school and junior high group. And sports have become much more competitive, with kids specializing in only one sport. While this can make a better athlete in that sport, it usually tends to create injuries if they just play that one sport year-round.”

To help the public understand this and other issues of sports safety, community outreach to parents and coaches is an important focus of the Hospital’s sports medicine professionals.
For the past 11 years, HSS also has sponsored what is now the longest running and best attended sports medicine conference on young athletes in the country. The program has attracted well over 4,000 health professionals.

For the past several years, members of the Women’s Sports Medicine Center at HSS have presented a program on injury prevention in young female athletes – created by physical therapist Theresa Chiaia, PT, and her rehabilitation colleagues – to parents and coaches to an all-girls school in Manhattan. More recently, they have created a prevention program to specifically address the higher incidence of ACL injury in girls.

“Much of ACL injury prevention has to do with training,” says Jennifer L. Solomon, MD. “Boys know how to land because they receive much more specific sports training than girls. They go into a squat position. Girls are not taught how to land correctly. They land in a stiff legged position, which puts a lot of stress on their knees.”

Beth E. Shubin Stein, MD, also sees many more young females than males with patellar instability and multiple knee cap dislocations. “Women in general are more predisposed to this injury then men are,” says Dr. Shubin Stein, “and it is a very debilitating problem for young women. Ten years ago, if the problem continued to recur, these young women would have had to undergo bone cutting procedures in order to stabilize their knees with almost a year of recuperation.”

Today, these women benefit from a new surgery – medial patella femoral ligament reconstruction – that has revolutionized care for patients with patella instability. “It has changed the rehabilitation for these injuries,” says Dr. Shubin Stein. “Rather than having to cut bone, the procedure is a soft tissue reconstruction much like the ACL reconstruction. Patients can walk after surgery as opposed to being on crutches for six to ten weeks, and the return to sport is between four and six months rather than a year.”

Adds Dr. Solomon, “An important aspect of what we do is providing integrated health care. We look at the patient’s entire well being. What’s nice about the Women’s Sports Medicine Center is that we have multiple specialties practicing together to help the patient in the best way that we can.”

Andrew D. Pearle, MD, Associate Team Physician for the New York Mets, also directs coverage of three New York City high schools in the Public School Athletic League. “We cover their games and hold a clinic once a week for players,” says Dr. Pearle who, along with several of the Hospital’s orthopedic residents, make sure that a team of HSS doctors is affiliated with each high school team. “We develop a relationship with the players and coaches, and when players get hurt we make sure that they are seen here at HSS. If the players need surgery or rehabilitation, we all come together to make sure that happens. We’ve worked very hard through the Hospital to deliver comprehensive care to these teams. Our goal is to provide kids from public schools that have limited resources access to the same type of care that the professional athlete receives.”
Rehabilitation and Recovery

3. Physical therapist Greg Fives, PT, MSPT, SCS, works with Kate Brownson on rehabilitation exercises to strengthen her legs.
One major difference between professional and amateur athletes is the time they can devote to training and rehabilitation. When combined with their advanced physical condition going into a rehabilitation program, a professional athlete’s efforts generally result in a much quicker rate of recovery.

“Our physical therapists are key to what we need to achieve with athletes,” says Dr. Scott Rodeo. “Many of our therapists are pioneers in all forms of physical therapy treatment and contribute to advancing the field of sports medicine.”

“Physical therapists are integral to the progression of the field,” adds Dr. Stephen O’Brien. “When we asked the question of how we could improve recovery from ACL reconstruction, due in large part to the recommendations of the therapists, we were able to greatly reduce the recovery time. I never feel like I’m more than half the equation. The therapist is a full partner, and just as important as the surgeon for the patient’s recovery.”

John T. Cavanaugh, PT, MEd, ATC, Clinical Supervisor, has been with the Sports Rehabilitation and Performance Center since 1985. Mr. Cavanaugh is credentialed as a certified athletic trainer and physical therapist. A competitive soccer player in college, he has served on the medical staff of the Pan American Games in Rio, Brazil; as Head Athletic Trainer for the USA Swimming team at the 2006 World Short Course Championships in Shanghai, China, and most recently on the U.S. Olympic medical staff in Beijing.

“We have good relationship with our doctors,” says Mr. Cavanaugh. “We understand the surgery, we understand the pathology. They know that when they send their patients to us, they are in good hands.”

The Hospital’s physical therapists and athletic trainers play a huge role in the prevention and treatment of sports injuries. The physical therapist develops specific rehabilitation guidelines for patients following a comprehensive evaluation and works collaboratively with surgical and medical colleagues, pre- and post-surgery to get the athlete back on the field. Athletic trainers work side-by-side with the athletes at the clubhouse and on the field, giving advice on how to prevent injuries, assessing the injury if and when it happens, and taking care of it at that immediate point in time.

“It is very important for us to not only instruct the patients in the right exercises,” says Mr. Cavanaugh, “but to help them understand how to modify their activities based on their symptoms and functional limitations. If a patient doesn’t have the motion or the strength to negotiate stairs, we show them how to do stairs without irritating the injury.”

Mr. Cavanaugh and his colleagues tailor their treatment plan to the individual patient. “You progress them...”
Jaime Edelstein, PT, MSPT, CSCS, Assistant Section Manager of Sports Rehabilitation and Performance, instructs Casey Maxwell on a training pulley to help increase the range of motion of her shoulder.

from here to there if they meet certain criteria as opposed to following a pre-set timeline for reaching certain recovery points," he says. “For example, there might be an exercise a patient is ready to do at six weeks even though the standard protocol says 10 weeks. We would have this patient move ahead.”

Peak Performance
“What makes us unique is that Sports Rehabilitation and Performance is a collaborative team. Our physical therapists and exercise specialists work together to develop a tailor-made therapy or fitness program that will achieve the best result for our patients and clients,” says Theresa Chiaia, PT, Section Manager, Sports Rehabilitation and Performance. In the Hospital’s new Performance Center, Polly de Mille, RN, RCEP, CSCS, Coordinator of Performance, and a performance team work with patients who have had physical therapy and want to work on overall fitness, and with clients who want to improve their level of fitness and maximize performance. Exercise specialists are also involved in injury prevention. In addition, video analysis in combination with a comprehensive interview with the team, a musculoskeletal assessment by the physical therapist, and a fitness assessment by the exercise specialist provides the athlete with a customized results package.

The Spine in Sports
As a physiatrist with HSS, Peter J. Moley, MD, specializes in non-operative treatment focused on restoring function. Dr. Moley has a particular interest in spine injuries of athletes. “The lumbar spine is a very important joint used by athletes for competition and return to play,” notes Dr. Moley. “It is just as important to performance as hip strength, quad strength, and hamstring strength. You also have to consider whether a bad back may have played a role in causing a hip or knee injury or
how low back pain may be affecting an athlete’s overall performance.”

Dr. Moley, a former rower, has particular expertise in caring for oarsmen with back pain. In fact, lower back pain is prevalent among intercollegiate rowers. “Sitting is the highest pressure you can have in a disc,” says Dr. Moley. “Rowing affects a very specific part of the spine. Rehabilitating a rower is challenging because they then go and sit for hours on the water rowing, causing the back problem to flare.”

According to Dr. Moley, studies of rowers have shown that they have very strong thighs, but their abdominal and lower back strength is no better than an average college student. “We therefore try to exercise muscles that aren’t often used, including some of their rotational muscles,” explains Dr. Moley. “We make sure they normalize rotation of the thoracic spine while we work on lumbar spine strength. We also work on their hip strength. When we have the rowers stronger in supine and standing, we get them back to sitting positions during exercising. Our goal is to build all the musculature and strength around the involved disc. These patients do very well.”
Dr. Scott Rodeo investigates how to promote healing in injured soft tissues at the basic science level.
Advancing the Field of Sports Medicine

The past three decades have seen a revolution in the treatment of sports-related knee and shoulder injuries, with much of the pioneering work taking place in the laboratories and operating rooms of Hospital for Special Surgery. Improved understanding of ligaments and tendons, methods to promote healing, and refinement in arthroscopic techniques have made it possible for athletes to return to peak performance levels.

The Hospital's scientists are addressing two basic questions in sports medicine. How do you take care of the acute injury and restore function? How do you prevent the premature development of osteoarthritis and joint destruction? “An injury to a ligament sets up a cascade of events that can lead to joint destruction,” says Steven R. Goldring, MD, Chief Scientific Officer. “So we have to look at both the mechanisms of short term repair and the role of inflammation, joint mechanics, and genetic influences in the long term outcomes.”

Understanding ACL Research
A clinician-scientist, Dr. Scott Rodeo spends several hours each week in his laboratory investigating the cellular and molecular processes in ligament healing with support from a $1.4 million, four-year National Institutes of Health (NIH) grant. “As a clinician, you know what the problems are and you know what questions need answering in the laboratory,” says Dr. Rodeo. “How do ligaments heal or why don’t they heal? How does mechanical load affect ligament reconstruction? When can patients start bending their knee? These are very relevant clinical questions that relate to how we treat patients who have had ligament surgery.”

Dr. Jo Hannafin is also a clinician-scientist. Her three-year, $1.1 million NIH grant is supporting investigations to determine how to stimulate ACL repair or regeneration. “The ACL is notorious for its failure to heal,” says Dr. Hannafin. “The question is why? If Scott and I can both be successful in what we do, we may ultimately be able to optimize ligament healing or to accelerate repopulation of the ACL graft with normal cells. This would permit refinement of current ACL reconstruction techniques to promote improved recovery and determine a scientific basis for the design of postoperative rehabilitation.”

A Step Ahead of Arthritis
Peter A. Torzilli, PhD, Program Director, Tissue Engineering, Regeneration, and Repair Program, and his colleagues are looking at the influence of trauma on the articular cartilage in the knee. “If you have an anterior cruciate ligament rupture, whether it’s repaired or not, it is now well known that anywhere from five to 15 years after the injury, the person will develop osteoarthritis in the knee. What we want to know is, given an injury to an ACL, do patients change their kinematics of walking or knee motion that can cause damage to the cartilage and lead to osteoarthritis? And, was there damage done to the cartilage at the time of injury that can also lead to osteoarthritis? These are the questions that everyone is asking now.”
Improving Surgical Outcomes
Dr. Andrew Pearle directs the Hospital’s Computer Assisted Surgery program, which is helping to make surgical procedures more precise. “Computer assisted surgery uses navigation that is like a Global Positioning System for orthopedic surgery,” says Dr. Pearle. “The computer displays a three-dimensional virtual image of the patient’s anatomy on a screen, allowing you to see exactly where you are putting a tunnel, a drill hole, or a screw.”

Surgeons have been using these tools in the OR to perform joint replacement surgery. More recently, Dr. Pearle has been investigating their applicability in ACL surgery. “We have devised models of the ACL to understand kinematics in the normal knee, in the ACL injured knee, and after various types of ACL reconstruction,” says Dr. Pearle. “We’ve also been testing ACL reconstructions to determine which procedure best reproduces the intact normal knee and ways to precisely angle the new graft.”

Anil S. Ranawat, MD, an orthopedic surgeon with expertise in meniscal and ligament surgery, including revision ACL surgery, is evaluating robotic surgery, partial knee replacement, and mobile-bearing technology to improve patient outcomes.

Robert G. Marx, MD, MSc, orthopedic surgeon, and Dr. Hannafin are collaborating with the American Orthopaedic Society for Sports Medicine to better understand factors that affect outcomes after revision ACL reconstruction. “Revision ACL reconstruction is much more technically demanding compared to primary ACL reconstruction because of previously placed screws, staples, and tunnels,” explains Dr. Marx. “Placing the new ACL graft where there has been prior surgery is challenging. Detailed preoperative planning with x-rays, CT scans, and MRI images helps plan for potential scenarios interoparatively, but one must also be flexible to adjust depending on what is found during surgery.”

Saving the Shoulder
A recent study by HSS orthopedic surgeons showed that patients who underwent a rotator cuff repair experienced pain relief and improved shoulder function, even after a tear recurrence. The study evaluated a group of 15 patients approximately eight years after their rotator cuff repair. None of the patients needed further treatment or surgery, and none had experienced persistent shoulder pain.

Dr. Struan Coleman is looking at how to facilitate recovery from rotator cuff repair at a basic science level. The tendons in the rotator cuff are connected to short, but very important, muscles. “In chronic rotator cuff problems, very often the muscle does not function,” says Dr. Coleman. “We are investigating the role that stem cells may play in regenerating these muscles and in facilitating the healing process.”

Dr. Andrew Pearle is advancing the role of computer-assisted orthopedic surgery to help improve surgical precision and ultimately patient outcomes in ACL reconstruction and other procedures in the knee.
The Sports Medicine and Shoulder Service at Hospital for Special Surgery is one of the oldest, largest, and most highly respected departments in the field. This distinguished group of physicians, individually and together, provide outstanding care to athletes with all levels of skill representing virtually every professional and recreational sport. For information on each of the physicians of the Sports Medicine and Shoulder Service, please visit www.hss.edu/sports.
2008 Leadership Report

Left to right: Stephen A. Paget, MD, Physician-in-Chief; Aldo Papone, Co-Chair, Board of Trustees (seated); Louis A. Shapiro, President and CEO; Thomas P. Sculco, MD, Surgeon-in-Chief and Medical Director; Dean R. O’Hare, Co-Chair, Board of Trustees (seated); and Steven R. Goldring, MD, Chief Scientific Officer.
As the largest musculoskeletal specialty hospital in the world, Hospital for Special Surgery has a responsibility to also be the best – with more than 250,000 patient visits for musculoskeletal disorders and autoimmune diseases; for the 3,000 employees who carry out our mission each and every day; and for the trustees, volunteers, and many, many friends who embrace our vision and provide support in varied and extraordinary ways. In 2008, we continued to stay focused on meeting the needs of patients who, in growing numbers, chose Special Surgery for their care. At the same time, our physicians and scientists have maintained their commitment to finding solutions in the laboratories and at the bedside for complex clinical problems and providing unparalleled educational opportunities for residents and fellows who come here to train.

We are pleased to report that 2008 was one of our strongest years of operational performance. The Hospital continued to increase its patient volume and, at the same time, made great progress in further enhancing our patients’ experience. And our quality outcomes, which are so well-regarded throughout the medical community, improved from an already impressive level of performance.

We are honored that for the second consecutive year, *U.S. News & World Report* recognized Hospital for Special Surgery as the number one hospital in orthopedics in the country, while rheumatology remained among the top-ranked in the nation. For the 18th consecutive year, Special Surgery was top ranked in the Northeast in orthopedics and rheumatology. In 2009, the Hospital sustained its first place position in New York State for Joint Replacement Surgery and received the HealthGrades Joint Replacement Excellence Award.

We also scored in the top 15 percent nationwide in both overall patient satisfaction and patient willingness to recommend the Hospital to others on the first Hospital Consumer Assessment of Healthcare Providers and Systems. Released by the Hospital Quality Alliance, the assessment looked at different aspects of patient care as rated by patients themselves. HSS is the only hospital in New York City that will receive the Outstanding Patient Experience Award in 2009 based on this assessment. Using surveys designed by Press Ganey Associates, Inc., the industry leader in patient satisfaction assessments, we can measure satisfaction in several areas as compared to our peer hospitals. In the fourth quarter of 2008, HSS ranked in the 99th percentile of 1,025 hospitals nationwide on the Press Ganey patient satisfaction survey question of inpatient likelihood to recommend the Hospital to others. The results of the patient satisfaction surveys we conduct provide an important benchmark to assess and assist us in our ongoing goal to improve the patient experience.

**Advancing a Culture of Quality and Service**

These acknowledgements are a tribute to the experience, skills, and commitment of all of our staff and the importance of the patient-centered care environment in which we are able to deliver the highest quality musculoskeletal care. As we go forward, our goal is to continue to build on our accomplishments in quality and service, focusing on opportunities that will enable us to do even better. Our Strategic Plan identifies an important imperative for success in the way we provide care, in the service we deliver, and in the way we drive quality overall.

Through our Elevating Quality initiative, created under the Hospital’s Strategic Plan, we are establishing the highest standards in clinical quality and operational excellence in the field of musculoskeletal medicine. Our entire organization, including the Board of Trustees, is working towards setting, meeting, and exceeding quality and service expectations. In 2008, we completed the reorganization of our quality process, including the creation of the Hospital’s Quality Coordinating Committee, co-chaired by Dr. Steven B. Haas and Dr. Steven K. Magid, and the creation of an oversight group – the Hospital Quality Council – co-chaired by Louis A. Shapiro, President and CEO, and Thomas P. Sculco, MD, Surgeon-in-Chief, with representation from the Board of Trustees and medical staff leadership. In addition, individual Hospital departments are determining the most important quality indicators in their respective areas and identifying ways to measure their successes.

The new quality review infrastructure, under the outstanding leadership of Dr. Magid, and Michelle Horvath, Assistant Vice President, Quality Management, has been embraced by all members of the staff. As a result, the Hospital is very focused on ways to drive and measure quality, how it can be more responsive to identifying trends, and can more quickly implement programs to improve performance.
The Hospital's overall surgical site infection rate was reduced from 0.35 percent to 0.26 percent – compared to a national rate of more than 2 percent; overall pulmonary embolus rate decreased from 0.48 percent to 0.25 percent; and overall deep vein thrombosis rate showed a reduction from 0.96 percent to 0.43 percent. We continue to work on reducing our infection rate to an absolute minimum, and our best practices in infection control have positioned us as a hospital that is likely to have the lowest infection rate for orthopedics in the world.

Measures of Excellence

In addition to the Hospital’s major undertaking in quality and safety, a number of other noteworthy accomplishments allowed us to improve and build upon our foundation of excellence in musculoskeletal care. Our financial foundation remains strong, with volume increasing by 12 percent in 2008 over 2007. And, in an era in which the National Institutes of Health (NIH) had less funding to provide for research, HSS increased its federal grant portfolio by 14.6 percent over 2007, with awards totaling $22.4 million. Total active awards for 2008 totaled $32.7 million, an increase of 14.2 percent or $4.1 million over the previous year.

Our extraordinary orthopedic surgical outcomes reflect a vital collaboration that is ongoing among our orthopedic surgeons, rheumatologists, and anesthesiologists. The Hospital’s Center for Musculoskeletal Perioperative Medicine, led by rheumatologist C. Ronald MacKenzie, MD, and anesthesiologist Michael K. Urban, MD, PhD, assures the best results for our patients – many of whom present with complex clinical issues. In 2007-2008, physicians in the Hospital’s Division of Rheumatology served as the musculoskeletal perioperative specialists for over 12,000 orthopedic surgery patients. The involvement of our rheumatologists and internists in the care of patients undergoing surgery helps to ensure the best possible outcomes.

As we expanded our clinical capacity throughout the year, we were very successful in recruiting nursing staff to meet this increased demand and continue to serve patients with the highest level of quality. Over the course of 2008, we hired 51 full-time RNs and by November 2008, our RN vacancy rate was 4 percent – significantly lower than the 13 percent average RN vacancy rate for the Greater New York area.

In October 2008, the Hospital’s building plan was approved by the City of New York, bringing us one step closer to expanding our hospital in order to accommodate the growing number of patients seeking our care. This spring, we will complete work on our new lobby, which has been enlarged to create a spacious, more welcoming, and comfortable environment for patients and visitors.

Technology plays an increasingly important role both in the provision of high-quality care and in promoting operational efficiencies throughout the organization. With the installation of CliniCIS in mid-2007, many benefits accrued to clinical practice in 2008 from the availability of electronic patient orders, test results, medication alerts, and chart documentation. The Picture Archiving and Communication System (PACS), now accessible in the operating rooms and physician offices, enables the viewing of digital images on computer screens and allows management of medical images in an electronic format. We also improved efficiencies in the operating rooms with the implementation of a new state-of-the-art Instrument Tracking system in Central Sterile Supply. Using barcode technology, the tracking system can identify the location of any instrument used in the OR at any point during the cleaning and sterilization process.

Our clinicians and scientists regularly distinguish themselves, and HSS, by serving in leadership roles of orthopedic and rheumatology societies and associations; through the delivery of major presentations at professional meetings, including the American Academy of Orthopedic Surgeons and the American College of Rheumatology; in the awarding of numerous national and international honors; and as authors, editors, and reviewers of the most prominent medical and scientific journals. In 2008, our physicians and scientists had 256 articles published in such leading, peer-reviewed publications as the *Journal of Bone and Joint Surgery, Chemical Reviews, Clinical Orthopaedics and Related Research, Journal of Clinical Investigation, Journal of Immunology, Arthritis and Rheumatism, Immunity,* and *Nature* to name a few.
In addition, two books for the consumer – *Dancing at the River's Edge: A Patient and Her Doctor Negotiate Life with Chronic Illness*, co-authored by Dr. Michael Lockshin with one of his patients, has been published to wide acclaim, and *Say Goodbye to Knee Pain*, co-authored by Dr. Jo Hannafin, is now available in a Kindle edition.

**Spotlighting Translational Research**

For the past two years, the Hospital has been moving forward with an ambitious plan to integrate its basic, translational, and clinical research efforts to allow us to maintain dynamic cutting edge research and sustain our level of scientific excellence into the future. The objective is to create a platform for insuring the translation of basic science findings to patient care. Translational research calls on the tools of modern science and cellular and molecular biology to understand disease and to develop novel and unique approaches for treatment. By closely aligning research and clinical priorities, we can expedite the application of new therapies to the treatment of patients with musculoskeletal and autoimmune diseases.

To this end, scientists at Special Surgery are working together across disciplines to demonstrate how scientific discovery in the laboratory can ultimately affect clinical situations, incorporating a multidisciplinary bench-to-bedside approach to understanding disease. Translational research teams, made up of clinicians and basic scientists, have targeted a number of areas to address, including complications of total joint arthroplasty; facilitating bone healing; and soft tissue repair, to name a few. One of our largest translational research efforts to date focuses on systemic lupus erythematosus and complications of the disease related to pregnancy, neurocognitive function, and cardiovascular disease.

At HSS, the Center for Education and Research on Therapeutics (CERT), funded by the Agency for Healthcare Research and Quality, is obtaining outcomes data on the thousands of patients each year who undergo joint replacement surgery at HSS and supporting clinical studies to determine the clinical, patient demographic, and prosthetic device characteristics associated with improved outcomes in total joint replacement. Our comprehensive Total Joint Replacement Registry continues to exceed enrollment targets with over 9,000 patients enrolled to

**Welcome to New Doctors**

Hospital for Special Surgery continues to recruit outstanding physicians who enable us to remain the leader in our fields and serve the ever-increasing number of patients who come to us for musculoskeletal care. Please join us in welcoming:

Michael J. Klein, MD, a distinguished bone pathologist and gifted educator, has joined Hospital for Special Surgery as the Director of Laboratory Medicine and Pathologist-in-Chief. He succeeds Peter G. Bullough, MD, who retired as Director and Chief after 40 years of service. Dr. Klein comes to us from the University of Alabama, where he was the Director of Surgical Pathology.

Dale J. Lange, MD, a distinguished neurologist, has been selected to succeed Moris Danon, MD, as the Chief of Neurology. Prior to joining HSS, Dr. Lange was Director of the Division of Neuromuscular Disease and the Director of the EMG Laboratory at Mount Sinai Hospital, and Chief of Neurology at the Bronx Veterans Administration Hospital.

Chitranjan S. Ranawat, MD, a world-renowned orthopedic surgeon specializing in total hip and total knee joint replacement procedures, who was with Special Surgery from 1969 to 1994, has returned to HSS. For the past 15 years, Dr. Ranawat served as the James A. Nicholas Chairman of the Department of Orthopaedic Surgery at Lenox Hill Hospital.

We are also pleased to welcome:

Jonathan C. Beathe, MD  
Anesthesiology

Semih Gungor, MD  
Anesthesiology

Evette Ferguson, MD  
Medicine

Scott J. Ellis, MD  
Orthopedic Surgery

Amar S. Ranawat, MD  
Orthopedic Surgery

Elizabeth M. Manejías, MD, Physiatry

Anthony Chang, MD  
Radiology

Juliet Aizer, MD  
Rheumatology

Emma Jane MacDermott, MD, Rheumatology
date. This progress has also generated eight pilot research studies based on the data collected regarding outcomes, variations, and economic impacts of total joint surgeries.

Registries, such as the one used in CERT, provide the mechanism for acquiring and storing information, processing data, and applying knowledge to patient care. As the largest provider of musculoskeletal care, we are in a pivotal position to be able to document what works and what does not, understand why, and then, when we institute an intervention, evaluate the outcome. The Hospital currently has more than 30 patient registries that range from very specific conditions such as basal joint arthritis to those more broad-based such as the Autoimmune Disease Registry and Repository.

Recently, the Hospital created an unprecedented research program to better understand, prevent, and treat osteoarthritis – the most common cause of disability and loss of work, and a frequent reason for joint replacement. The Osteoarthritis (OA) Initiative is an integrated basic, translational, and clinical research program that focuses on identifying risk factors for OA, prevention or reduction of inflammation at the onset of the disease, medical intervention to slow its progression, and surgical solutions when OA has damaged joint structure.

In 2008, Lionel B. Ivashkiv, MD, Senior Scientist and Director of Basic Research, was appointed Associate Chief Scientific Officer. In this newly created position, Dr. Ivashkiv, who holds the David H. Koch Chair in Arthritis and Tissue Degeneration, is charged with developing a long-term strategic plan for basic science research programs; fostering collaborative research among the basic science programs; and enhancing translational research. He will work with Steven R. Goldring, MD, Chief Scientific Officer, to develop and execute this plan, which will enhance HSS’ position as a leader in musculoskeletal and autoimmune disease research. Dr. Ivashkiv has an outstanding record of NIH funding and has made major contributions to the understanding of inflammatory mechanisms in autoimmune and musculoskeletal disorders.

One of the criteria for a successful and sustainable academic institution is that it provides tenured security and support for its scientists. The Hospital’s Division of Research now has a tenure program in place for the academic scientific track, further enabling us to recruit research faculty of the highest caliber.

In Memoriam: Patricia Mosbacher

It is with deep sorrow that we note the passing of Patricia Mosbacher, a cherished member and Vice Chair Emerita of our Board of Trustees. A committed member of the Board since 1987, Mrs. Mosbacher played a pivotal role in raising funds for the Hospital as the longtime chair of our Annual Tribute Dinner and a Co-chair of the Development Committee. In addition to her work with the Hospital, Mrs. Mosbacher was a trustee of the Freedom Institute of New York, where she had also served as Chair. She was a former trustee of New York Medical College and the South Street Seaport Museum, and a former member of the national Board of Directors of Project Hope. She also served as a Chair of United Hospital of Port Chester. She was a graduate of the Dwight School in Englewood, New Jersey and attended Bennington College.

At Hospital for Special Surgery, her memory lives on with the annual Patricia Mosbacher Honorary Lecture in Orthopaedic Trauma and the Patricia Mosbacher Flower Fund that were created in her honor. She will long be remembered for her grace and wit, as well as her style and dedication to our mission. In the Hospital’s new lobby, a permanent fresh flower display, generously supported by members of the Board and the Mosbacher family, will allow all who come to HSS to remember this most elegant, kind, and dedicated woman.

Enhancing Care of International Patients

In 2008, our International Center arranged 456 initial consultations for patients with our physicians, and there were 284 International Center inpatient and ambulatory surgery procedures, including physiatry and pain management procedures.

In addition, we approved a strategic plan for expanding our clinical and educational initiatives abroad. We continue to engage in dialogue with organizations abroad who are interested in forming a collaborative relationship that focuses on developing their orthopedic capability locally. We have also developed an International section of our Web site (www.hss.edu/international.asp), which highlights the depth and breadth of our current international activity.

Members of the Hospital community are also involved in philanthropic and volunteer projects throughout the world, including those who have founded international charitable organizations dedicated to providing quality medical care where access to care is often difficult. Many members of our Sports Medicine and Shoulder Service serve as team physicians and medical advisors for international sporting
events, including the summer Olympics held in Beijing, highlighted in this issue of Horizon.

In October, the second International Society of Orthopedic Centers (ISOC) meeting was held at the Schulthess Klinik in Zurich. The Society, which was founded by HSS, has senior physician representation from the leading orthopedic centers around the world. The mission of this new organization is to facilitate the exchange of ideas and best practices among the premier orthopedic institutions and to collaborate on patient care, education, and research to affect improvement in orthopedic care on a global scale. The third ISOC meeting is planned for spring 2010 at Istituto Ortopedico Rizzoli in Bologna, Italy.

The Importance of Philanthropy
Philanthropy is critical to Special Surgery and the work that we do. The generosity of our grateful patients, corporate donors, and foundations, as well as the support of our trustees and medical staff, help ensure that our patients receive the highest level of care possible, that our research continues to advance the understanding of musculoskeletal disease, and that our facilities can expand to accommodate demand. In 2008, we raised over $22.5 million – an excellent achievement in this financial environment.

On June 16, 900 guests gathered at the World Financial Center Winter Garden for the Hospital’s 25th Annual Gala, honoring GE CEO Jeffrey Immelt and the late Richard Laskin, MD. Chaired by Mrs. Douglas A. Warner III, the Gala raised over $2 million in unrestricted support. Our Autumn Benefit Committee, chaired by Cynthia Sculco, hosted the first Magical Evening at the Rainbow Room in November. Attracting a crowd of 380 people, the evening raised over $400,000 for medical education. In December, pediatric care and research were the focus of a Big Apple Circus Benefit, a sold-out event raising over $95,000. Trustee Susan W. Rose served as Honorary Chair; Drs. Michelle Carlson and Daniel W. Green served as Co-Chairs.

Looking Forward
The accomplishments of Hospital for Special Surgery in 2008 were achieved as a result of the incredible efforts of an extraordinarily talented HSS family – our employees, volunteers, management team, medical staff, and Board of Trustees. We are all part of a tremendous team and we are extremely proud of the role each of our employees plays in the care of our patients and the strengthening of our institution.

Current local, national, and global conditions pose very real concerns for the healthcare industry, but HSS remains a committed, focused institution dedicated to improving the health and mobility of patients with diseases and disorders of the musculoskeletal system. 2009 will indeed be a year of change, challenge, and opportunity. We are extremely fortunate to be entering this very important year with the absolute best team in health care. We now look forward, rededicating ourselves to pursuing opportunities that will allow us to improve and build upon a foundation of excellence and remain an established leader in musculoskeletal medicine around the world.

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Aldo Papone
Co-Chair

Louis A. Shapiro
President and CEO

Thomas P. Sculco, MD
Surgeon-in-Chief and Medical Director

Stephen A. Paget, MD
Physician-in-Chief

Steven R. Goldring, MD
Chief Scientific Officer
William Stutt is a downhill skier, likes to windsurf and golf, and “bikes pretty hard.” Carolyn Stutt usually walks four to five miles a day, is an avid gardener, and even enjoys shoveling snow. And they very much enjoy their quality of life. But both have had their share of orthopedic injuries and passionately agree that if your quality of life is suffering from pain and immobility associated with a musculoskeletal condition, “don’t delay – get help, get it fixed.”

Mr. Stutt’s injuries date back to the late 1940s – the result of playing lacrosse while a midshipman at the United States Naval Academy. “I’d had an ACL that had not been intact for all those years and a meniscus that had been removed years ago,” says Mr. Stutt. “By 2000, I had developed a pretty severe arthritic condition, and my knee was steadily getting worse. I exercised regularly and played sports, but it was more and more difficult.”

Mr. Stutt contacted Richard L. Menschel, his long time friend and partner at Goldman Sachs, who was then Chairman of the Board of Trustees at Hospital for Special Surgery. Mr. Menschel put him in touch with Thomas P. Sculco, MD, who replaced Mr. Stutt’s left knee in April of 2001. “It worked out so well that I decided to do something with my right shoulder, which had been dislocated a number of times – again from lacrosse,” says Mr. Stutt. “I thought why put up with that? The shoulder was becoming very arthritic just as the knee had.” Mr. Stutt went to see Russell F. Warren, MD, of the Hospital’s Sports Medicine and Shoulder Service. Just five months following Mr. Stutt’s knee replacement, Dr. Warren replaced his shoulder. “Both worked out very, very well,” says Mr. Stutt.

Mrs. Stutt also came to know Special Surgery not long after her husband’s experiences. In fact, she injured herself while Mr. Stutt was recuperating from his knee replacement at their home in Florida. “I slipped on a rug and crashed my right foot into the support for the bed. My second toe immediately pointed straight to the ceiling.” Mrs. Stutt returned to New York two months later to have surgery with Jonathan T. Deland, MD, Chief of the Hospital’s Foot and Ankle Service. “In May 2007,” says Mrs. Stutt, “I was back for my left foot. The hurricanes of ’06 took a chunk out of a door sill step. We tried to prevent people from using the step, but I stepped right in.” Mrs. Stutt tore ligaments involving four toes. This surgery was much more complex, requiring pins to repair the damage. Just five months later, Michelle G. Carlson, MD, a hand specialist with HSS, removed a cyst and bone spurs from a finger in Mrs. Stutt’s right hand, returning her hand to normal function.

“So we feel quite indebted to HSS,” says Mr. Stutt. “We’ve supported Johns Hopkins because of the good experiences we’ve had there. We decided that we wanted to continue to support institutions which are number one in their fields and that has been a large part of our philanthropic outlook.”

The Stutts’ contributions to Hospital for Special Surgery have included gifts to arthroplasty and sports medicine research, including support of the Russell F. Warren Chair in Research. “It is getting increasingly difficult for these institutions to have the flexibility in funds to do the research, either developmental or basic,” says Mr. Stutt. “Therefore it becomes more and more important to have private funds to address those needs. We strongly believe that the money should go to those institutions that are at the top of their game.”

“If more discoveries can lead to improvements in quality of life as we all get older – isn’t that wonderful?” says Mrs. Stutt. “We both believe in that because we were helped to regain our own quality of life through procedures that would not have been possible that many years ago. My husband is the best example – he’s going to be 82. I’m going to be 67. We continue to be very active and are grateful to HSS for enabling that to happen.”
Hospital for Special Surgery continued to thrive in 2008, thanks to the thousands of individuals, foundations and corporations that supported us throughout the fiscal challenges we faced as a nation. With the help of dedicated friends, HSS raised nearly $22.5 million to support patient care, research, education, and the renovation and expansion of our clinical facilities.

We cannot emphasize strongly enough the importance of our individual donors to our success as an institution. More than 75% of the funds raised in 2008 came from individuals and their bequests, a continuing trend at HSS and for philanthropy nationwide.

For each of the last three years, both the number of gifts and the number of donors have grown. In 2008, HSS received over 6,600 contributions from more than 5,200 donors, an increase of 15% over 2007.

Our success in 2008 was bolstered by the extraordinary generosity of several donors, some making their first gift, others continuing a long tradition of support for HSS. Among them are Ellen and Joe Wright, who made a gift of $2.5 million to the Children’s Pavilion, a 'pediatric hospital within a hospital' that will consolidate our pediatric services in an environment uniquely designed and built for children and their families. This gift brought the Wright’s total commitment to the Capital Campaign to $3 million.

Principal support was also received from an anonymous donor who contributed over $1.7 million in support of the Richard S. Laskin, M.D. Chair in Musculoskeletal Education and the Division of Arthroplasty Endowment Fund, while Rheuminations, Inc., made a gift of $1.4 million to benefit the Mary Kirkland Center for Lupus Research.

Gifts of $1 million came from an anonymous donor and the Li Ka Shing Foundation, whose first-time commitment will support the Osteoarthritis Initiative. The OA Initiative is an unprecedented collaboration of our clinicians, basic scientists, and clinical researchers, undertaken to find new ways to diagnose and treat this disease.

Building on Success: The Campaign for the Future of HSS Approaches $100 Million Mark

Building on Success: The Campaign for the Future of Hospital for Special Surgery remains a top priority, dedicated to the expansion of our clinical facilities and the development of a robust clinical research program. HSS raised $17.2 million for the campaign in 2008, including almost $5 million for capital expansion and close to $10 million for research. This brings the total raised for Building on Success to nearly $98 million since it began in September 2005.

As the largest capital renovation and expansion in the Hospital’s history, the campaign will help us to meet the needs of increasing numbers of patients and build upon the strength of our leadership and the extraordinary volume of patients we serve to significantly advance evidence-based medicine in orthopedics, rheumatology and related disease. The David H. Koch Medical Building, the first new clinical structure at HSS in a decade, will play a critical role in these endeavors.

Building on Success is dedicated to improving the quality of life for patients today and for generations to come. It is a testament to the generosity of our supporters and to Special Surgery’s commitment to providing the best care to each person who passes through our doors.
In 2008, surgical volume grew by over 12 percent and outpatient visits for non-surgical services such as radiology and rehabilitation grew by over 11 percent. The quality of our care continues to be outstanding, and we were successful in recruiting the physicians, nurses, and other staff needed to keep pace with this growth. The consistent volume growth over the past 10-plus years is attributable to a number of factors, including increased awareness of the Hospital’s unique services and outstanding outcomes; continued and growing acceptance of orthopedic procedures due to superior implants and high success rates; the general aging of the population; and the growing number of younger individuals electing to have orthopedic procedures to maintain their active lifestyles.

The Hospital continues to operate in an environment that poses numerous financial challenges. The challenges that the Hospital has historically faced such as reductions to Medicare and Medicaid reimbursement, complex and costly regulatory requirements, and the high cost of labor, real estate, and construction in the New York City metropolitan area are now exacerbated by significant declines in the investment markets, tight credit markets, and a deepening economic recession. The New York State budget for the upcoming fiscal year will result in reductions to the Hospital’s revenues substantially in excess of historical levels. As we move ahead to 2009, the impacts on fundraising, volume growth, access to credit markets, and revenue remain uncertain; however our stellar reputation and solid financial foundation have positioned us to respond to these impacts.

Our consistently strong operating results in past years provided the resources to make the significant investments in personnel and capital infrastructure that were needed to accommodate the demand for the Hospital’s services and advance the strategic goals of our mission. The first phases of a major facility expansion and renovation, which included additional operating rooms, inpatient beds, doctor offices, and magnetic resonance imaging (MRI) units, were completed during 2006 and 2007. Other accomplishments in recent years include the implementation of an inpatient clinical information system, digital radiology, and other advanced information technology systems.

The Hospital’s Research Division is internationally recognized as a leader in the study of musculoskeletal disorders and related autoimmune disease. Our commitment to both basic and clinical research is an important component of the overall Hospital mission and is critical to Special Surgery maintaining and enhancing its status as a premier institution in orthopedics, rheumatology, and related disciplines. The close relationship between our scientists and medical staff enables a rapid application of scientific discovery to the patient care setting. During 2008, $31.7 million was dedicated to a wide variety of research initiatives and programs. The ongoing recruitment and retention of gifted scientists and clinicians will enable the Hospital to continue to expand the scope of its research activities and maintain its leadership position in its fields.

With a history of achieving positive operating margins through strong volume and revenue growth, successful fundraising, and an organization-wide emphasis on efficiently managing financial resources, the Hospital is positioned to respond to its current challenges. We will continue to monitor economic trends closely and prudently invest the resources and take the steps necessary to continue to provide the highest quality musculoskeletal care, train top physicians, conduct pacesetting research, and accommodate the demand for our services. Our major facility expansion will continue through 2012 and provide additional operating rooms, inpatient beds, a pediatric pavilion to serve the unique needs of our youngest patients, doctor offices, and expanded space for radiology and other outpatient services. This expanded capacity, along with an ongoing focus on efficiency, will enable the Hospital to keep pace with the anticipated growth in our patient population. In addition, we are committed to developing and implementing technology that will enhance our ability to deliver care in a safe and efficient manner. Now, more than ever, we remain focused on investing the resources to build upon our foundation of excellence in musculoskeletal care, research, and education.

Stacey L. Malakoff
Executive Vice President and
Chief Financial Officer
# Financial Information

## Statement of Income

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hospital for Special Surgery</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Revenue</td>
<td>$515,892</td>
<td>$470,711</td>
</tr>
<tr>
<td>Total Expenses</td>
<td>507,103</td>
<td>456,240</td>
</tr>
<tr>
<td>Operating Income</td>
<td>$ 8,789</td>
<td>$14,471</td>
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</tbody>
</table>

| **Affiliated Companies**  |            |            |
| Total Revenue            | $ 47,030   | $ 48,205   |
| Total Expenses           | 44,933     | 46,869     |
| Operating Income         | $ 2,097    | $ 1,336    |
| Operating Income         | $ 10,886   | $ 15,807   |

## Statement of Financial Position

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current Assets</td>
<td>$114,304</td>
<td>$ 98,972</td>
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<tr>
<td>Investments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current</td>
<td>120,402</td>
<td>168,923</td>
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<tr>
<td>Long Term</td>
<td>74,956</td>
<td>60,924</td>
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<tr>
<td>Assets Limited as to Use</td>
<td>36,574</td>
<td>29,699</td>
</tr>
<tr>
<td>Property, Plant and Equipment – Net</td>
<td>307,671</td>
<td>310,236</td>
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<tr>
<td>Other Non-Current Assets</td>
<td>30,481</td>
<td>38,010</td>
</tr>
<tr>
<td>Total Assets</td>
<td>$684,388</td>
<td>$706,764</td>
</tr>
</tbody>
</table>

| **Liabilities and Net Assets** |            |            |
| Current Liabilities         | $143,993   | $136,405   |
| Long Term Debt              | 185,041    | 189,045    |
| Other Non-Current Liabilities | 68,373   | 22,326     |
| Total Liabilities           | 397,407    | 347,776    |
| Net Assets                  | 286,981    | 358,988    |
| Total Liabilities and Net Assets | $684,388 | $706,764 |

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**Note:**

1. Includes activities relating to Hospital for Special Surgery and its affiliates (Hospital for Special Surgery Fund, Inc., HSS Properties Corporation, HSS Horizons, Inc., HSS Ventures, Inc., and Medical Indemnity Assurance Company, Ltd).
2. Complete audited Financial Statements of both Hospital for Special Surgery and affiliates are available upon request from the HSS Development Department at 212.606.1196.
3. Excludes $18.0 and $43.0 million of restricted philanthropic contributions in 2008 and 2007, respectively.
4. For purposes of comparison, certain reclassifications have been made to the 2007 column to conform with the 2008 presentation.
5. Such reclassifications had no effect on changes in net assets.
6. Excludes changes in unrealized gains and losses on investments.
7. Includes $1.1 million of transactions between affiliates that are eliminated in consolidation in 2008 and 2007.
8. Includes $35.5 million and $32.7 million of transactions between affiliates that are eliminated in consolidation in 2008 and 2007, respectively.
9. Includes $26.7 million and $41.3 million at December 31, 2008 and 2007, respectively.
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Francis W. Gamache, Jr., MD
(Neurosurgery)
Lloyd B. Gayle, MD
(Plastic Surgery)
Assistant Attending Orthopedic Surgeons
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Jaimo Ahn, MD, PhD
Kashif Asfaq, MBBS
(Trauma)
(Limb Lengthening and Reconstruction)
Olufemi Ayeni, MD
(Abdominal Reconstruction)
Yosef Blum, MD
(Adult Reconstruction)
Edwin Cadet, MD
(Hand)
David Gay, MD
(Hand)
A. Ylenia Giuffrida, MD
(Hand)
Matthew Hepinstall, MD
(Adult Reconstruction)
Alexandre Hughes, MD
(Spine/Scoliosis)
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(Abdominal Reconstruction)
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(Plastic Surgery)
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(Adult Reconstruction)
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(Adult Reconstruction)
Volker Musahl, MD
(Plastic Surgery)
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(Foot/Ankle)
Kenneth Park, MD
(Foot/Ankle)
Mark Prasarn, MD
(Trauma)
Mathias P. Bostrom, MD, was awarded the prestigious Career Development Award from the Orthopedic Research and Education Foundation, which is given annually to one orthopedic surgeon in the country.

Mary Goldring, PhD, was elected to the Board of Directors of the Osteoarthritis Research Society International.

Steven R. Goldring, MD, Chief Scientific Officer, was appointed Chairman of the Research Committee of the National Arthritis Foundation. Dr. Goldring was recently awarded the Paul Klemperer Award from the New York Academy of Medicine, which is given to an outstanding scientist in the area of connective tissue diseases and arthritis.

Jo A. Hannafin, MD, PhD, was the 2009 recipient of the Orthopaedic Research Society’s Women’s Leadership Forum Award. Dr. Hannafin was also named Vice Chair for Development for the Orthopaedic Research Educational Foundation.

Lionel B. Ivashkiv, MD, Senior Scientist and Director of Basic Research, has been appointed Associate Chief Scientific Officer at HSS. Dr. Ivashkiv has an outstanding record of NIH funding and publication.

Joseph M. Lane, MD, was appointed to a four year term on a Study Section for the NIH/NIAMS. Dr. Lane was named to the Board of Trustees Member of the American College of Rheumatology.

Stephen A. Paget, MD, has been elected as a member of the American Board of Osteopathic Internal Medicine and also as a member of the American College of Rheumatology's Research and Education Foundation.

Russell F. Warren, MD, was inducted into the American Orthopaedic Society for Sports Medicine Hall of Fame.
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Gwendolyn Rhoss

Pharmacy
Tina Yip

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Pamela Katkin

Public Relations
Phyllis Fisher

Risk Management
Joanne Mella

Safety
Giovanni Abbuzzese

Security
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Chao Wu

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Standards and Accreditation
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Strategic Planning
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Laura Dicker

Web
Julie Pelaez

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Geri Dilorenzo

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Catherine Drumm

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Maryann Eisele

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Alicia Fisher

7 East

Debbie Harris

Ambulatory Surgery

Jayne Hoffmann

Pre-Surgical Screening/Holding Area

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Special Procedures Unit

Imsoo Park

Perioperative Services

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Rheumatology

Noreen Ryan

PACU/4 East

Anne Stroud

8 East

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Chaplain Chenault Conway
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Fr. Jordan McConway
Sr. Margaret Oettinger
Fr. Carlos Quijano

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Mrs. Robert H. Freiberger

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William R. Salomon
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Torsten N. Wiesel, MD
William R. Salomon: Thoughtful Giving with a Charitable Lead Trust

In the 1970s William R. Salomon decided he had been suffering too long with his hip pain. Knowing that hip replacement surgery could be the answer, he sought to find an orthopaedic surgeon who didn’t think that at age 60 he was too young for the procedure. He found that physician in Philip D. Wilson, Jr., MD, then Surgeon-in-Chief of Hospital for Special Surgery. At that time, hip replacement in the United States was still very new, and surgeons were reluctant to perform the procedure in someone in their nineties. But Dr. Wilson and his colleagues at HSS were at the forefront of hip replacement surgery, having traveled to England to learn from Sir John Charnley, the “father of modern total hip replacement,” who had originated the procedure in the early 1960s.

“My wife, Virginia, happened to be at the Hospital seeing Dr. Lee Ramsay Strush, and he saw me limping away,” recalls Mr. Salomon. “He said to Virginia, ‘Why doesn’t Billy have that repaired?’ and she said, ‘He would love to.’ So he sent me to Dr. Wilson, and I had the operation. Obviously it was quite successful.”

Mr. Salomon’s new hip served him well for 22 ½ years before he needed revision surgery – performed at HSS by Douglas E. Padgett, MD, a protégé of Dr. Wilson.

Wanting to do something for the Hospital, Mr. Salomon, Honorary Chairman of Citigroup and former Chairman of the Board of Trustees in 1979, with he and his wife becoming among the Hospital’s most generous and devoted benefactors.

Almost 10 years ago, the Salomons created a Charitable Lead Trust – a planned giving method that provides critical support for the Hospital’s research efforts. Their gift included the establishment of an endowment fund to create the Virginia F. and William R. Salomon Chair in Musculoskeletal Research. “When I wanted to make a contribution in Special Surgery, I learned that the charitable lead trust was a very rewarding method by which a person could make a gift,” says Mr. Salomon. “I also wanted to do the most good for the Hospital.”

Today, charitable lead trusts are becoming popular additions to donor retirement planning as they offer attractive, fixed, secure payments donors can count on, even in an unpredictable market. They provide the donor with control over the investment and an opportunity to balance what they want to leave for their heirs with their philanthropic goals.

With a charitable lead trust, a donor can transfer assets (including cash, art, and stocks) to a trust for a set term of years and receive preferrential tax treatment, including current income tax deductions and a reduction of capital gains taxes. Annual payments – as either a fixed amount or a set percentage of the trust’s value each year – are made from the trust to a designated charity or charities. The charity is the beneficiary throughout the term of the trust. At the expiration of the trust, the heirs inherit the assets.

According to a recent article in the Wall Street Journal, “What makes them [charitable lead trusts] especially attractive now is an historically low special tax rate.”

If you would like more information on planned giving opportunities, please contact Rachel Cameau, Associate Director, Planned Giving, at 212.774.7252.
Hospital for Special Surgery is an affiliate of NewYork-Presbyterian Healthcare System and Weill Cornell Medical College.

Team Players
Hospital for Special Surgery’s sports medicine professionals oversee care for competitive athletes and teams in virtually every sport.

Middle: Brandon Jacobs, New York Giants
Clockwise, from the top:
Devin Harris, Nets Basketball; Sarah Bates Johnson, US Rowing Team; Andy Roddick, ATP; Wilson Chandler, New York Knicks; Seth Stammer, New York Red Bulls; Adenike Oyesile, St. Peter’s College; Richard Kiplagat, Iona College; and Michael Phelps, USA Swimming team

Success in Sports – and Sports Medicine