

# **Reflections from The Hughston Clinic President**

The Hughston Clinic has made a difference in the lives of our patients for 63 years. From the very beginning, we focused our attention on and integrated our services specifically for the treatment and rehabilitation of orthopaedic injuries and musculoskeletal disease. In doing so, we developed an exceptional multi-speciality orthopaedic practice with 21 board-certified orthopaedic surgeons serving 9 clinic locations in Georgia and Alabama.

At The Hughston Clinic, we use the latest technology in electronic medical records and digital x-rays, and our employees are certified specialists in orthopaedic care. Our MRI radiologists are experts in the field of orthopaedics, and we pride ourselves in accurate and timely reports. The Hughston Clinic's physical therapy, occupational therapy, industrial medicine, and sports rehabilitation divisions are dedicated to rebuilding a patient's strength and mobility so he or she can return to an independent lifestyle.



The Hughston Surgical Center in Columbus is located

under the same roof as The Hughston Clinic, which means, patients can see their surgeon, receive diagnostic testing, have surgery, and return for postoperative appointments all at the same facility. Outpatient surgery is convenient and provides one-on-one nursing care that is perfect for patients who need personal attention.

Jack Hughston Memorial Hospital has received excellent ratings from our patients through Health-Grades. The hospital has been among the top 5% of hospitals in the nation for patient experience for 4 consecutive years (2009-2012). The hospital is also named as one of the 100 best hospitals in the nation in 2012 for joint replacement and orthopaedic surgery. In 2011, the Joint Commission recognized Jack Hughston Memorial Hospital in the top 18% of accredited hospitals for being "Top Performers on Key Quality Measures<sup>TM</sup>" for surgical care.

What makes Hughston different? We are devoted to our patients. We offer compassion, when a patient needs compassion the most—when they are hurt or sick. Most importantly, we provide the skills and services to help our patients heal and return to a fulfilling life.

Our goals in patient care remain steadfast. Hughston's ability to recognize and adapt to the everchanging environment of healthcare is really what excites me today. Our ability to adapt improves the



quality of life for our patients, for our community, and for our employees. As we remember our past, the vision for Hughston's future is as bright today as it has ever been in the history of our organization. Through our solid leadership and because of our dedicated employees, our healthcare delivery system is unparalleled and well positioned to provide responsive, state-of-the-art orthopaedic care for the next 60 plus years!

John Well

John I. Waldrop, MD



# 1989 - 2013 25 YEADS For A Healthier Lifestyle

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# **Advances in Orthopaedics**

Since the first issue of the *Hughston Health Alert* was published 25 years ago, there have been numerous advances in orthopaedics. Significant trends include the transition from open to arthroscopic procedures for some surgeries, inpatient to outpatient surgery, nonanatomic to anatomic surgical reconstruction surgery, and the use of new technology to aid diagnosis, repair, and healing.

# Advances in knee surgery

The anterior cruciate ligament (ACL) is one of the 4 major ligaments of the knee. Treating an ACL injury is a good example of the advances that have taken place (**Fig. 1**). Reconstruction of the torn ligament (tissue connecting two bones) was once done through a large open incision that exposed the entire knee joint. Patients often stayed in the hospital several days after surgery. With the advances in arthroscopy and the development of specific instrumentation, the reconstruction has become primarily an arthroscopic procedure performed through

#### Fig. 1. Advances in ACL surgery Original ACL surgical Current ACL surgery using incision 3 smaller incisions. Patella (kneecap) Femur (thighbone). Allograft Incisions The torn ACL ligament has been replaced with The Hughston an allograft (tissue graft). Foundation. Inc @2013 Tibia Incision (shinbone) Fibula Fig. 2. Autologous chondrocyte implantation (ACI), a cartilage restorative option The cells are later implanted into the defect and covered with a patch Possible where they continue to grow and form new biopsy Cartilage sites cartilage. -Lesion Flap sutured The Hughston in place Foundation. Inc. ©2013 The patient's own cartilage Injection cells, or chondrocytes, Flap of cultured taken from the biopsy are removal cells under then grown in a lab to site flap increase the number of healthy cells.

several small incisions. Often a patient goes home to recover the same day with instructions to begin moving the knee immediately and bearing weight as soon as possible with the help of crutches.

During ACL surgery, the torn ligament is replaced or reconstructed with a tissue graft. Initially, reconstructions were performed using the patient's own tissue, called an autograft, that was harvested from the central portion of the patellar tendon or the hamstring tendons. Today, when the ACL is reconstructed, surgeons have a multitude of graft options available. Use of allografts (graft obtained from a tissue donor to be used in another person's body) have increased with excellent safety profiles and clinical outcomes. The availability of allograft is especially helpful in revision surgeries (correction of a previous surgery) or for knees with more than 1 injured ligament.

Injuries to the articular cartilage (the covering on the ends of bones) of the knee joint continue to be a challenging treatment problem; however, several options other than joint replacement have become available. Debridement, or removing unstable fragments from torn or worn cartilage, can provide pain relief. More restorative options include **autologous chondrocyte implantation** (ACI). The surgeon takes a biopsy of healthy cartilage from the patient's knee, and the patient's own cartilage cells, or chondrocytes, are then grown in a lab through a special process. The cells are later reimplanted into the defect and covered with a patch where they continue to grow and form new articular cartilage (**Fig. 2**). For large defects involving cartilage and bone, a fresh osteochondral allograft from a cadaver and matched in size can be implanted to replace the damaged or missing tissue. Young, active patients who suffer with continued significant pain after removal of a torn meniscus may be candidates for another procedure—a meniscal transplant. During this procedure, a donor meniscus is implanted to relieve pain and prevent articular cartilage breakdown.

#### Advances in shoulder surgery

Significant advances have also been made in shoulder surgery. Rotator cuff (group of muscles surrounding the shoulder) tears remain a common cause of shoulder pain. When nonsurgical treatment fails to alleviate pain, reattachment of the rotator cuff to bone is recommended. Twenty-five years ago when the *Hughston Health Alert* was first published, repair was performed through a large open incision (**Fig. 3**). Although open repair of the rotator cuff remains the best option for some patients, most orthopaedists now perform arthroscopic rotator cuff repair through several small incisions. Co-existing disorders of the shoulder socket, biceps, and acromioclavicular joint (joint between the clavicle and shoulder blade) can be easily treated during the arthroscopic surgery, and patients can often go home the day of the procedure.

Shoulder instability, in which the humeral head slips in and out of the glenoid socket, can be disabling to the patient. Stabilization of the shoulder using current arthroscopic techniques provides results equal to that of open surgical repair while preserving the rotator cuff.

#### Advances in diagnostic tools

There is no substitute for a careful patient history and physical examination to help physicians diagnose an injury or illness. However, magnetic resonance imaging (MRI),



Fig. 3. Comparison of rotator cuff repair techniques

Normal rotator cuff



**Fig. 4.** Two samples of MRIs and how it is used to confirm a diagnosis.

Torn rotator cuff

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The Hughston Foundation, Inc. ©2013

a scan that shows the bones, muscles, tendons, and ligaments, has proven to be a useful tool for confirming a diagnosis and monitoring treatment (**Fig. 4**). Using strong magnetic fields and radio waves to produce cross-sectional images of cartilage, tendons, and other soft tissues without using radiation, a MRI is an asset in viewing progress during healing.

# **Emerging technology**

Other recent technological advances include the use of platelet rich plasma (PRP) injections to accelerate tissue healing from tendon, ligament, and muscle injuries. Blood is drawn from the patient and placed in a centrifuge to concentrate the platelets. The platelets are then injected back into the injured area under ultrasound guidance. PRP has been used in outpatient procedures for the treatment of overuse injuries, such as tennis elbow, Achilles tendonitis, and rotator cuff tendonitis. Although this technology is exciting and shows promise, few studies currently exist reporting its results.

Despite procedural advances and the emergence of new technologies that aid patient care today, the goal remains the same as it was in 1949 when Jack C. Hughston, MD, began his practice in Columbus, Georgia. Dr. Hughston believed that research, education, and treatment went hand in hand to improve patient outcomes. Our mission remains the same today—to help our patients live a healthier lifestyle.

> Champ L. Baker III, MD Columbus, Georgia

# Athletic Training— Yesterday and Today

More than 60 years ago, "trick knees" and "knock-down" shoulders were among the terms used to describe athletic injuries. A group of men from 50 major colleges and universities who called themselves "athletic trainers" realized their knowledge of injuries was limited. They agreed to meet in Kansas City to share ideas and experiences and learn from each other to increase their knowledge of athletic injuries. The meeting was the birth of the National Athletic Trainers' Association (NATA), which has grown from the original 200 members to a membership today of more than 35,000 worldwide.

As with all new organizations, multitudes of problems and decisions presented themselves: the name, organizational form, purpose, qualifications for membership, and possible alliances with groups or organizations that had similar goals and objectives. The organization's name was an obvious choice and conference lines were followed to form districts. The purposes of the organization were education, professional enhancement, and recognition of athletic training as a vital part of an institution's commitment to care for its athletes. Membership qualifications included passing a test and performing service time with athletic trainers already in the field. Those who were already working as athletic trainers at the time of the organization's founding were grandfathered in. The American Medical Association (AMA) was chosen for an alliance and readily agreed to support the NATA.

Orthopaedists from the AMA took the NATA under their wings, promoting athletic trainers' education and professional advancement. When Title IX (genderequality rules that colleges and universities must follow) was enacted in 1972, the NATA accepted women into its membership, and today, women account for more than half of the membership. As the status of athletic trainers grew and as more and more schools realized the need for and value of proper and professional care of their athletes, the opportunities for employment grew. High schools, physician's offices, rehabilitation groups, and industries added athletic trainers to their payrolls.

In the early days of the NATA, physicians didn't often volunteer to be on the sidelines bench with athletic teams because some looked down upon such attendance as a form of advertising. However, one man who marched to his own drummer was Jack C. Hughston, MD. After years of treating children with polio, he became involved with young athletes and their activities. Dr. Hughston's great passion was orthopaedics, with education a close second. He strongly believed that people should learn and teach, especially those in medicine and in service to others. To further education in sports medicine and share what they were learning from working with athletes, Dr. Hughston and a small group of orthopaedists spoke with high school coaches and athletic trainers at NATA seminars. They also hosted seminars that provided continuing education credits for physicians entitled "Medical Aspects of the Knee." As Dr. Hughston's practice and his reputation for successfully treating athletes grew, he founded the Hughston Sports Medicine Foundation, which is dedicated to research and education in orthopaedics and sports medicine. The Foundation offers fellowships in sports medicine and athletic training, other programs to teach medical professionals, and a variety of additional educational opportunities for those interested in advancing its mission.

For years, an individual could sit for the athletic training certification examination after attending an accredited university with an approved athletic training curriculum or interning with an athletic trainer for an extended period of time. In 2004, however, the internship route to certification was eliminated. Now the only route is by earning a 4-year college degree. The certification test has also undergone many changes. The older version consisted of a written, multiple-choice test, written simulation, and hands-on practical exam, all of which have now been replaced with a new computerized exam.

Athletes in all areas of sports benefit from the cooperation of athletic trainers, physicians, and other health care professionals in the education, study, and advancement of sports medicine. Today, athletic trainers continue to serve the needs of collegiate athletes, but many new opportunities are now available for them, including the performing arts, military, law enforcement, industry, television and movie studios, and operating rooms. It doesn't matter if the athlete is a professional or a weekend warrior; when either gets hurt, the goal is the same—to provide quality healthcare and get the athlete safely back into the game.

> Kenny Howard, ATC Auburn, Alabama,

and Andy Grubbs, MEd, ATC Columbus, Georgia

# Nutritional Guidelines for Sports and Training

Athletes and exercise enthusiasts can easily be confused by supplement advertisements and trendy diet approaches to nutritional science. The American College of Sports Medicine has provided a position statement based on human physiology as a guide for athletes. The guidelines demystify sports nutrition and allow the athlete to make healthy and smart decisions with respect to when and what to eat.

A calorie is a measure of energy in food. If you burn more calories than you eat, you will lose weight; eat more than you burn and you will gain weight. As an athlete, you should take in enough energy to perform your exercise regimen and repair injured tissue or your performance can suffer. In individuals who are exercising strenuously, low calorie diets can lead to loss of muscle mass, menstrual dysfunction, loss of bone density, stress fractures, fatigue, injury, illness, and prolonged recovery.

If you are an athlete, you need additional calories to complete your training or competition; therefore, you should first determine how many calories you need each day. **Table 1** lists the daily calorie requirement for a sedentary (non-exercising) adult based on age. Table 1 shows the amount of energy, or calories, you need to consume to get through the day without any additional exercise.

Table 1. Daily caloric requirement with age (years)				
Age	Male	Female		
20	2600	2000		
40	2400	1800		
60	2200 The Hugh	1600 ston Foundation, Inc. ©2013		

**Table 2** provides some examples of calories burned per hour of exercise for some common activities. Using both tables for example, a 40-year-old man who runs at 8 mph for 1 hour needs 3386 (2400 + 986) calories for the day. If he takes in less, he will lose weight. If he is not on a diet, the weight loss can affect his athletic performance.

<b>Table 2.</b> Average adult hourly caloric burn rate (73 Kg/164 lb person)					
Exercise	Calories	burn	ed per hour	2013	
Walking (2 mph)		183		С. ©	
Jogging (5 mph)		584		n, In	
Running (8 mph)		986		Idatio	
Water aerobics		292		Four	
Stair stepper		657		ston	
Cycling (10 mph)	)	292		Hugh	
Cycling (18 mph)		844		The	

If you eat a balanced diet, you probably get the recommended requirement of vitamins and minerals. The box below lists some special situations that can require taking supplements.

### Who may need supplements?

- Vegetarians or athletes who follow a non-fat diet
- Athletes who train indoors or in northern latitudes
- Premenopausal female athletes
- · Athletes with iron deficiency anemia
- Athletes who have high sweat rates The Hughston Foundation, Inc. ©2013

Carbohydrates are stored in the liver and muscles as glycogen (stored sugar, or glucose, molecules). Carbohydrates generate more energy than protein or fat, the other sources of fuel. Forty percent to 60% of daily calories should come from carbohydrate sources and should equal 6 to 10 grams of carbohydrate for every kilogram of body weight. The problem with glycogen is that we cannot store very much of it. Glycogen can be depleted during endurance sports, such as distance cycling or running; therefore, carbohydrates should be consumed during exercise to maintain blood levels. Alternate fuels, such as fat and protein are mobilized to produce energy once glucose levels are low. Since fat and protein are inefficient at producing energy, an athlete's performance can decline.

Fat helps with the absorption of vitamins A, D, E, and K, but it is an inefficient source of energy. Although we use fat simultaneously with glycogen, we store fat in much larger quantities. Daily dietary fat should be 20% to 35% of an athlete's total caloric intake. Over the first 4 hours of exercise, 40% of the energy generated comes from fat stores, and that percentage increases with training.

Protein should make up 10% to 35% of an athlete's daily caloric intake. Depending on the type of exercise you do, you may need more. The daily recommended amount of protein for adults is 0.8 grams of protein for every kilogram of body weight. The amount of protein needed increases to 1.2 grams for endurance athletes and 1.7 grams for strength training athletes. Protein does not play a large part in energy production in the athlete; but it helps tissue to repair and recover after exercise.

Water, another nutritional component to exercise, helps to maintain blood pressure and to cool the body. Water, like carbohydrates should be consumed before, during, and after exercise. Water balance can be influenced tremendously by the environment. In hot humid environments, water loss increases through sweating as your body tries to keep cool. In cold environments, water ingestion is often lower. In high altitudes, you can lose water through your breath when you exhale.

One to 4 hours before exercise, you should eat a highcarbohydrate, moderate-protein, and low-fiber snack. An athlete should also drink 5 to 7 milliliters of water or sports drink per kilogram of body weight. Overhydration provides no benefit and increases your urge to void. During exercise, you should consume 30 to 60 grams of carbohydrate per hour to maintain your blood glucose levels. Fluid should be consumed to match your losses from sweating. Water absorbs better and reflux decreases if taken with electrolytes and carbohydrates, such as sports drinks. Drinking only water during long endurance events can lead to electrolyte problems and is not recommended. After exercise, you need to replenish glycogen stores and add protein to help repair injured tissue. Carbohydrates should be immediately consumed at approximately 1 gram of carbohydrate per kilogram of body weight within the first 30 minutes after exercise ends. Fluid replacement goals should be equal to 20 ounces of water consumed for every 0.5 pounds of body weight lost during exercise.

There is no magic behind sports nutrition; an athlete needs food for energy before, during, and after exercise.

Water and electrolytes are essential, as well. Nutritional supplements are not regulated or tested by the Food and Drug Administration like medications; therefore, you should talk to your doctor before starting a new supplement, especially an energy aid.

C.J. Osier, MD Columbus, Georgia

Suggested Reading:

American College of Sports Medicine. Nutrition and Athletic Performance: Joint Position Statement. Medicine & Science in Sports & Exercise. 2009 41(3): 709 – 731.

http://journals.lww.com/acsmmsse/Fulltext/2009/03000/Nutrition\_and\_ Athletic\_Performance.27.aspx#. Last accessed November 20, 2012.

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# **Advances in Total** Joint Replacement

Arthritis is the most common cause of disability in the United States. The Centers for Disease Control and Prevention (CDC) estimates that 21 million adults have limited activity due to arthritic joints. With the aging of baby boomers, the number is expected to increase to near epidemic levels by 2020. Often, patients face the prospect of joint replacement surgery after nonoperative measures, such as oral medications, injections, bracing, or therapy, have failed and their joint pain lessens their guality of life. Fortunately, knee and hip replacement are commonly regarded as 2 of the most successful interventions in the modern era of medicine.

Orthopaedic surgeons began exploring the idea of replacing arthritic joints in the 1940s with early techniques involving the use of ivory, gold, and other materials. Modern hip and knee replacement techniques emerged in the 1970s. Surprisingly, the fundamentals of hip and knee replacement have remained largely unchanged over the past 40 years. However, the focus has shifted slightly over the past 25 years toward improving postoperative recovery, implant longevity, and joint function. The challenge for today's joint replacement surgeon is to determine which new treatments represent true advances and which are

Fig. 2. Surgical approaches to the knee. Dotted line shows incisions in a right knee.



Medial parapatellar approach



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Midvastus approach





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reinventing the wheel. In general, the 2 areas that have seen the greatest changes are surgical approach and implant materials.

# **Surgical Approach**

Knee

The most common approaches for performing knee replacement surgery, or total knee arthroplasty (TKA), include the medial parapatellar (incision descends down and around the kneecap), midvastus (incision splits the vastus medialis muscle), and subvastus (L-shaped incision below the vastus medialis muscle)

approaches. More recently, the "minimally invasive" (MIS) approach has been introduced (Figs. 1 & 2). The approach involves a smaller skin incision, less muscle disruption, and less stretching of the knee tendons by not flipping the kneecap. In theory, the approach can lead to less pain, faster recovery, and a shorter hospital stay. Results of MIS TKA have been mixed with studies showing some minor short-term gains, but minimal long-term benefit. MIS TKA introduces a unique set of potential complications that includes stretching of the skin, poor alignment of the knee, and improper placement of the components that can cause early failure. Patients who have severe knee deformity, have significant knee stiffness, or are overweight may not be appropriate candidates for this approach.





Subvastus approach

Minimally invasive approach

**Fig. 3.** Surgical approaches to the hip. Dotted line shows incisions in a right hip.



# Hip

MIS principles have also been applied to total hip replacement surgery, or total hip arthroplasty (THA). One of the hottest topics in THA is the direct anterior (front) approach, often considered hip surgery that does not require muscle cutting. Traditionally, hip replacement has been performed either through the posterior (back) approach or lateral (side) approach (Fig. 3). The direct anterior approach involves entering the hip joint between muscles instead of requiring elevation of muscle or release of tendons. Again, in theory, this leads to less pain, faster recovery, and more natural hip function. Although the procedure has received a lot of attention in the press and has been championed by some total joint surgeons, there are almost no studies in the orthopaedic literature that support the striking claims. Time will tell whether the theoretical benefits of the procedure represent a true advantage over time-tested techniques or whether the approach has its own associated pitfalls.

# **Implant Materials**

The current "gold standard" for both hip and knee replacement is a metal (most often cobalt-chromium) implant that articulates against a high-density plastic (polyethylene) liner. These materials have been used for bearing surfaces for years and have a successful record; however, longevity of the artificial joint remains a primary concern for surgeons and patients. With this in mind, several new technologies have evolved in recent years that aim at improving the life span of total hips and knees.

Many advances have been made in bearing surfaces for hips. A metal ball on a plastic liner remains the most widely used articulation. The manufacturing of hip liners has evolved over the years, and today's current generation of specially treated highly cross-linked liners wear out at a rate much slower than conventional plastics. Ceramic head balls and hip liners have also been introduced because their hardness makes it an ideal material in reducing wear of the artificial joint. However, concerns over possible hip squeaking and cracking of the ceramic material have made some surgeons cautious about its use. One of the more controversial topics in hip replacement surgery has been metal-on-metal hip replacement. A metal ball on a metal liner provides the theoretical advantages of reduced wearing of the joint and the ability to use larger diameter balls to improve hip range of motion and stability. However, growing concern over potential allergic reaction to metal ions generated by the implants has caused their use to drop dramatically.

In the hip, most surgeons have adopted the use of cementless designs, which allow for bone growth into the replacement parts and offer the potential for improved longevity over the original designs that were cemented in place. Cementless implants are available for knee replacement, but their success rate has not been as great.

Joint replacement surgery has tremendously improved the quality of life for patients during the past 30 years. Although the general principles behind the procedures have remained constant, certain advances in surgical approach and implant materials have helped improve the function and longevity of the devices. Surgeons and patients must carefully consider each new technique and technology to decide what is best for the patient. Physicians and patients should always balance the lure of a better mousetrap with the uncertainty that accompanies an untested and unproven new technique or device.

> Benjamin Schwartz, MD Columbus, Georgia





The Hughston Health Alert was recently awarded the Grand Award in the 2012 APEX Awards for Publication Excellence for the Winter 2011 issue in the Newsletter category. The APEX Awards for Publication Excellence is an annual international competition that recognizes outstanding publications from newsletters and magazines to annual reports, brochures, and Web sites.

### The Hughston Health Alert has placed every year since 2002 in this competition and this is the third time it has won the Grand Award in the Newsletter category.

Editor Thomas N. Bernard, Jr., MD

Managing Editor Dennise Brogdon

Art Director Belinda J. Klein, MA

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6262 Veterans Parkway P.O. Box 9517 Columbus GA 31908-9517

> Appointments: 706-324-6661 1-800-331-2910



4401 River Chase Drive Phenix City, AL 36867 Phone: 334-732-3000 Fax: 334-732-3020

**Reflections from our Editor** 

It is an honor for me to serve as the current editor of the *Hughston Health Alert* during its 25th anniversary. The *Hughston Health Alert*, which is devoted to important issues concerning musculoskeletal health and fitness and other medical conditions, has evolved from a newsletter issued only to our clinic patients to a full-color quarterly publication with nearly 12,000 printed issues and approximately 7,000 e-mail subscribers. It receives local, state, national, and international interest. This level of success has only been achieved by "standing upon the shoulders of giants."



The *Hughston Health Alert's* dedicated managing editors, editorial board, and medical writers and illustrators seek to provide our patients and readers with useful, accurate, up-to-date health information. In this effort, we continue to strive to fulfill the goals of the founder of The Hughston Clinic and Foundation, Jack C. Hughston, MD. Dr. Hughston realized the important role of continued research, education, and communication in providing our patients with the best possible orthopaedic care.

As we celebrate these past accomplishments, we look toward the future inspired by the exciting developments occurring today in the treatment of musculoskeletal illnesses, and for our *Hughston Health Alert* readers, we predict the best is yet to come.

Thomas N. Bernard, Jr., MD

Thomas A. Bernard fr. me

The *Hughston Health Alert* is a quarterly publication of The Hughston Foundation, Inc. The Hughston Foundation is dedicated to helping people of all ages and skill levels attain the highest possible levels of musculoskeletal health, physical activity, and work readiness. Information in the *Hughston Health Alert* reflects the experience and training of physicians at The Hughston Clinic, PC., of physical therapists and athletic trainers at Hughston Rehabilitation, of physicians who trained as residents and fellows under the auspices of The Hughston Foundation, Inc., and of research scientists and other professional staff at The Hughston Foundation, Inc. The information in the *Hughston Health Alert* is intended to supplement the advice of your personal physician and should not be relied on for the treatment of an individual's specific medical problems.

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# **Reflections from the Sports Medicine Fellowship**

Because of his longtime interest in athletes and the prevention and treatment of their injuries, Jack C. Hughston, MD, began to educate other physicians by sharing what he had learned about the new specialty of sports medicine. In the early 1960s at the request of the American Board of Orthopaedic Surgery, Dr. Hughston, a pioneer in the field, began a sports medicine training program for orthopaedic residents. The program he developed became so popular that sports medicine became a regular part of the orthopaedic training for resident physicians. Several years later, the concept of teaching young physicians how to treat athletic injuries was further expanded. In the late 1960s, Dr. Hughston helped to create an orthopaedic sports medicine fellowship for doctors who wanted additional training and experience in the specialty of sports medicine. The Hughston Clinic and Foundation offered the first training program in sports medicine of its kind and the program continues today to be a leader in sports medicine research and education for physicians.

The first full-time orthopaedic sports medicine fellows came for a year of training in the late '60s and the program has continued uninterrupted since that time. Looking back 25 years,



between 1986 and 1988, 24 orthopaedic and family practice physicians completed the Hughston Clinic's 1-year fellowship. Dr. Hughston and I were the faculty mentors at that time. During that time period, fellows included Dr. Fred Flandry, currently a staff physician at Hughston and a member of the fellows' teaching faculty, and Drs. John Henderson and William Roundtree, who are family physicians in Columbus. Also in that group was Dr. David Martin, who is now the head of the American Board of Councilors and team physician for Wake Forest in Winston-Salem, NC. Other well-known sports medicine physicians who trained at Hughston during that time include Drs. Les Fowler, who served as team physician for the University of Alabama and David Zeman, the team physician for the Arizona Diamondbacks for many years. The tradition of graduating illustrious and dedicated sports medicine physicians continues today.

Founded in 1982, the Hughston Society is composed of residents and fellows who have trained at The Hughston Clinic through the years. It was formed to continue their education through their shared experiences and research efforts. The membership currently exceeds 500 physicians. At the first Society meeting held in Columbus, Dr. James Andrews, was elected president. He was on the staff of the Hughston Clinic at the time and has since moved his practice to Birmingham. For the last 4 years, the Society has met jointly with the American Sports Medicine Society headed by Dr. Andrews, to continue the education of its members during their biannual scientific sessions.



The Society is active and strong, as is the fellowship program, which is now certified by the American Council for Graduate Medical Education. Today, I head up the Fellowship Committee, whose active members are Drs. Fred Flandry, Kurt Jacobson, and Patrick Fernicola, with ancillary staff members Drs. Champ Baker III, Ryan Geringer, and Matt Tucker. As they have for more than 40 years, Hughston fellowship-trained doctors will continue the traditions of the program started by Dr. Hughston and those who trained under him.

Champ L. Baker, Jr., MD





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# **Reflections from The Hughston Foundation President**

It began with only his dream.

An orthopaedic surgeon in a small private practice in Columbus, Georgia, was an unlikely candidate to challenge conventional wisdom, to rewrite the textbooks, and to usher in a new age of musculoskeletal healthcare by pioneering the field of sports medicine. Jack C. Hughston, MD, however, was no ordinary man, and his dream was no ordinary dream. He envisioned a large specialty medical practice staffed by some of the brightest minds and talented hands in orthopaedic surgery. He envisioned a healthcare center where those with problems no one else could solve could seek an answer. He envisioned a campus that would include his clinic; a specialty hospital, and a surgical care center that would become the model others would try to emulate. And at the center of his dream, there would be a foundation for learning—the glue that would bind the mission of his campus into a singular purpose. From his dream, the Hughston Foundation was born.



The Foundation soon exceeded even the dreamer's expectations. Through its researchers, writers, illustrators, and technicians, it became a respected center for research; it became an instrument to disseminate the discoveries of the research to doctors and patients, scientists and students, trainers and athletes. It became a destination for those who sought to learn and to grow. It became an essential stop for physicians and athletic trainers on the way to becoming leaders in orthopaedic sports medicine. It became an institution that gave back to the community it called home.

Today, many of the advances in orthopaedic surgery and sports medicine have their roots in the Hughston campus. Many of the world's leading musculoskeletal surgeons include time spent at Hughston on their resume. Today, untold numbers of recreational, professional, and industrial athletes at all levels still function because they were touched in some way by the dream.

So that dream lives on today in the work of the Hughston Foundation. Medical education remains a priority. This year, we publish the 25th anniversary issue of our patient education newsletter, the Hughston Health Alert. It remains an important source of musculoskeletal health information. Sharing what he learned was important to Dr. Hughston, and the Health Alert remains an integral part of the Foundation's mission today.

Never content to rest on past accomplishments, Dr. Hughston urged us, "If you're green, you're still growing; but if you're ripe; you're next to rotten." The dreamer demanded that we never fully ripen. While proud of our past, we look with great anticipation to what we can accomplish in the future.

Fred Flandry, MD, FACS