

Norwalk Community College Visits ONSF

Education is a vital component of the ONSF mission and plays an integral role in our efforts to improve the care and treatment of musculoskeletal disorders. The onsite ONSF Arthroscopy, Surgical Skills and Biomechanical Research Laboratory serves not only as a clinical research facility but also as an education facility frequently utilized by college and pre-med students and medical professionals.

Recently, physical therapy students from Norwalk Community College participated in Lab programs for two days in March and two in May. Each day, eight students attended the course entitled "Observation of Upper and Lower Extremity Dissection with Clinical



Instruction" and were instructed by Drs. Paul Sethi and Mark Vitale in March and Drs. Demetri Delos and Katherine Vadasdi in May. The students had a lecture review of human anatomy followed by anatomical dissection and demonstration of surgical approaches. In addition, ONS physical therapists were on hand to observe the four labs. These courses epitomized our education program and presented a valuable learning experience for the students.



In a very personal letter to Drs. Sethi and Vitale, students expressed their gratitude for the opportunity to study in the ONSF Lab. One student wrote, "This event...took text book knowledge to a level of a tangible experience." We strive to provide students with a respectful, relaxed and extremely professional experience. This concept was recognized by one student who said, "...it was great to see real anatomy instead of just models and pictures..." Another noted, "...the way Dr. Vitale asked questions during the dissection helped to reinforce all the knowledge I previously learned."

Programs like these encompass mentorship, a vital part of the training process. When most physicians look back on experiences that led them to pursue a path in medicine, they can identify individuals who inspired and encouraged them. In 1964, Dr. Louis Lasagna wrote, "I will remember that there is an art to mentoring and that what we teach is not more important than whom we teach, or how we teach, and that warmth, sympathy and understanding may be our most effective tools." ONSF takes great pride in mentoring students and is honored to serve the college community and beyond.

FEATURED ARTICLES -

3 *Surgical Site Infection*

4 *Community Outreach Workshops*

5 *Hip Arthroscopy: New Frontier*

IN THIS ISSUE

On the Cover - Norwalk Community College Visits ONSF	1
President's Message	2
Understanding and Preventing Surgical Site Infection	3
ONSF Gift to OGRCC	3
Community Outreach Workshops	4
Hip Arthroscopy: A New Frontier in Hip Preservation by Tim Greene, MD	5
"Tee-off" Cocktail Party	6
Meet our Board	6
What is Concussion 'Baseline' Testing? by Patricia McDonough- Ryan, PHD	7

BOARD OF DIRECTORS

Paul Sethi, MD
President

Vicki Leeds Tananbaum
Vice President

Katie Vadasdi, MD
Secretary

David Hirsch
Treasurer

Lauren Corrigan

Frank Corvino

Amory Fiore, MD

Richard Granoff

Jeffrey Konigsberg

Joseph "Casey" McKee

Milton Sender

Angela E. Tammaro

Paul E. Tramontano

Mark Vitale, MD

Nathaniel Barnum *Emeritus*

Mark Camel, MD *Emeritus*

Seth Miller, MD *Emeritus*

Message from the President . . .

Dear Friends,

Looking forward, I believe that year seven of ONSF promises to be better than all previous years, perhaps combined. As you read this edition of News Forum, I hope that you will come to the same conclusions that I have. It is truly amazing what momentum and strong support has done for the organization. Our mission is three fold: to perform valuable clinical research, to educate and to reach out to our community. We are actively successful on each of these fronts. Our research position over the past few months focused on the reduction of surgical infections. This most recent data has been accepted for presentation at the American Orthopedic Society for Sports Medicine Conference in July 2014 and reflects the high caliber of our work and its unique contribution to medicine. In addition, the follow-up study to this research is already in progress and holds even greater promise for improving medical care.



Paul M. Sethi, MD

I am equally excited about the educational opportunities that have been and continue to be a defining part of ONSF. In the fall, we partnered with the NFL CT Alumni organization in presenting a spectacular information event about the significance of concussions in youth football. Between Tim Hasselbeck, Patricia McDonough-Ryan, PHD, Steve Thurlow and Dr. Mark Camel, we were able to cover all parts of the field. Gary Scott, Mitch Hoffman and Alicia Hirscht led our spring throwing athlete workshop. This was a program where the players rotated through stations learning about different facets of training, injury prevention and hitting techniques...and even got some signed baseball cards. We have partnered with Norwalk Community College and now have performed anatomical dissections for their physical therapy students; an experience that once again fundamentally changes the perspective on understanding anatomy and will positively affect patient care. We will have Mini-Medical School this summer, where high school students are selected to spend a week of medical school boot camp to test the waters and consider this as a career path. The annual ONSF Medical Education Conference was an overwhelming success last year, and we expect November's conference to be a maximum attendance event as we highlight the female musculoskeletal issues in different phases of life. This is just a scratch on the surface of our plans to partner with organizations in order to take ONSF to even greater heights.

At the annual Golf Outing "Tee-Off" cocktail party, I realized how much our group has grown. Despite all efforts, I could not work my way around the room and thank everyone; there were too many new and exciting faces and too many great discussions to make it to everyone. I was thrilled about being unsuccessful! There is just so much interest and buzz about ONSF. Golfers - we have contacted the weather gods and expect the golf outing day to be amazing! The course is ready for us, and the auction committee has secured some unique experiences. I hope to see you on the course or in the dining room at dinner.

I thank you all for your continued support, generosity and participation.

Save the Dates. . .

6th Annual Golf Outing at The Stanwich Club, Monday, June 9th, 2014

2nd Annual 5K RUN/WALK EXPO at the OGRCC, Sunday, September 21st, 2014

6th Annual Medical Education Conference, Greenwich Hospital, November 8th, 2014

Research Study: Understanding and Preventing Surgical Site Infection

As the field of shoulder surgery and particularly shoulder replacement grows, the risk of developing shoulder infection increases. Infection, when treated imperfectly, may be a devastating complication. Our goal is to help develop a universal measure to absolutely minimize post-surgical infection. Reducing complications obviously adds value to the patient experience and avoids the costly road of infection eradication. The bacterium (*Propionibacter Acnes*) that is most commonly attributed to shoulder infection is a very unusual organism; until recently, it was not properly recognized because it was so difficult to identify.

Now that one of the greatest bacterial offenders (in the shoulder) has been more clearly identified, we are looking for ways to prevent it from infecting patients. In our last study, we took over three hundred cultures and studied them. After careful analysis, we were able to identify when (during surgery) patients are most susceptible to this bacterial infection and were able to determine just

how frequently this bacteria is present. Now that we know when this bacterium may gain its access to patients, we are developing ways to attack the bacteria at the patient's point of vulnerability.

Sethi PM, Greene T, Vadasdi K, Miller S. Incidence of *P. Acnes* Culture after Primary Shoulder Arthroscopy. AOSSM Annual Meeting. Seattle, WA. July 2014

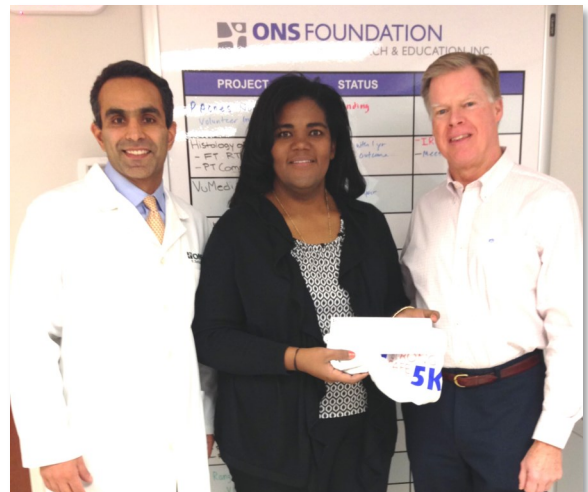
NEW STUDY UPDATE: *The second part of this study that examines a new method of cleansing the skin affected by this bacterium is well underway. We hope to have data from this study by the end of the year. If this new skin preparation is effective, this study has the potential to change how shoulder surgeons all over the world prepare their patients for surgery. This project has been presented before the Greenwich Hospital Institutional Review Board and has been approved.*

ONSF Presents Gift to Old Greenwich-Riverside Community Center

The ONS Foundation for Clinical Research and Education, Inc. (ONSF) held its first annual PLAY Strong, PLAY Safe 5K Run/Walk on Sunday, September 22nd, 2013 to benefit the Foundation's orthopedic and neurosurgery education initiatives.

The race, a USATF certified 5K course, started in front of the Old Greenwich Riverside Community Center (OGRCC) and traveled through scenic residential areas of Old Greenwich. In addition to the race, the event featured a Health Expo located at the OGRCC where participants and their families learned more about nutrition, training, injury prevention and running equipment.

In December, ONSF proudly recognized the community spirit of the Old Greenwich Riverside Community Center with a \$500 gift earmarked for youth programs. Present at the ONS Foundation Arthroscopy, Surgical Skills, Biomechanical Research Laboratory were: Paul Sethi, MD, President of ONS Foundation, Deelia Wadsworth, Executive Director of OGRCC and Casey McKee, ONSF Board member and 5K Co-chair.



Paul Sethi, MD, Deelia Wadsworth, Casey McKee

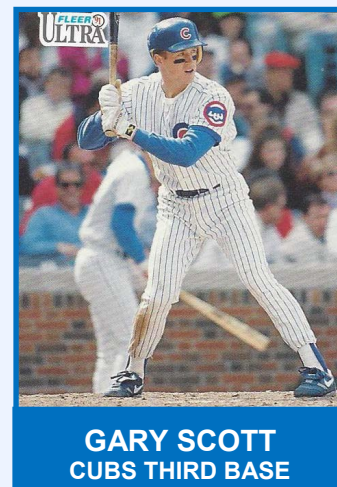
ONSF Community Outreach Workshops

Play Ball! Play Safe!

On March 6th, ONSF presented a free Baseball/Pre-season Conditioning Clinic at the Old Greenwich-Riverside Community Center. A large gathering of youth baseball players, their parents and coaches rotated through six consecutive work stations where safe conditioning, strengthening, throwing and hitting were demonstrated.

Gary Scott, former Chicago Cubs third baseman, shared his thoughts about being a professional player and thrilled the kids with personally autographed baseball cards! He was joined by Mitch Hoffman, CEO of Bobby Valentine Sports Academy who demonstrated pitching/throwing methods.

Orthopedic sports medicine specialist, Dr. Paul Sethi addressed the gathering and reviewed the latest research being developed to treat common arm injuries. ONS physical therapists Alicia Hirscht, Tanya Kalyuzhny and Nick Mucovic demonstrated proper conditioning exercises. All attendees received a Thera-Band and dynamic workout to take home.



Cycle Strong!



Alan Sheiner, Gloria Cohen, MD, Skip Beitzel and Dave Potucek

A free sport conditioning and injury prevention workshop for cycling enthusiasts was held on April 10th at the North Castle Public Library – Charles Elson Wing. Nearly 50 cyclists attended in order to learn about symptoms, causes and prevention of overuse injuries; cycling biomechanics and common riding errors that lead to injury; and proper stretching and strengthening techniques.

Dr. Gloria Cohen, an ONS sports medicine physician and former Team Physician for the Canadian National Olympic Cycling Team, was a featured speaker. An avid cyclist, Gloria addressed the gathering and shared her knowledge and expertise. Physical therapist, David Potucek from Elite Health

Services discussed exercise based strength training for cyclists.

In addition, Alan Sheiner, Rides Director of Sound Cyclists Bicycle Club, addressed issues relevant to winter training, cycling events, quality of riding and safety. He was joined by Skip Beitzel, owner of Hickory & Tweed, Armonk's premier ski and cycle shop, who underlined the importance of proper bike fit. Skip displayed a variety of bicycles – many state of the art models.



Hip Arthroscopy: A New Frontier of Hip Preservation

by Tim Greene, MD

Subtle causes of hip pain have largely gone unrecognized for many years. Most symptoms attributable to hip pain are commonly diagnosed as a groin pull or strain. Although groin or anterior hip pain can come from the hip flexor or groin muscles, it is often produced by a problem inside the hip joint. For decades, orthopaedic surgeons have treated hip arthritis with a high level of success and patient satisfaction. However, pre-arthritic hip conditions have mainly been ignored. Part of the problem is that until recent years, we have failed to recognize subtle causes of hip pain. Unfortunately, patients may see as many as four physicians, and take up to two years, to have their hip problem correctly diagnosed.

We now understand that the cause of hip pain in many people can often relate to an imperfect shape of the hip ball and socket. The variation in shape of the hip may come from a ball that is not perfectly round or a socket that is too deep or rotated. A ball that is more oval shaped will not completely fit into the socket with normal hip rotation. As the ball contacts the socket in the area of the imperfect shape, the hip labrum may be damaged or torn. The hip labrum is an important structure that serves to protect the cartilage in the hip. The tear in the labrum causes pain and may cause progressive damage to the articular cartilage resulting in eventual hip arthritis.

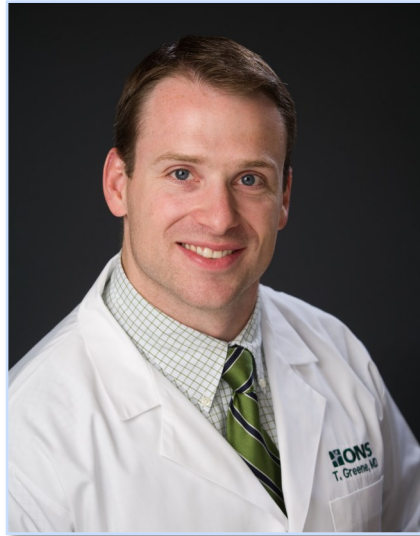
Armed with better understanding of the non-arthritic causes of hip pain, we are now able to correct many of these conditions arthroscopically. Hip arthroscopy was originally described in the 1970's but it has been slow to evolve. The main impediment was that, unlike the shoulder or knee, the hip is a deep structure that is difficult to access. We lacked the ability to safely access the hip in a minimally invasive way. In the last 5 to 10 years, there has been a significant evolution in the field of hip arthroscopy. We have developed the instrumentation to safely access the hip in a minimally invasive way. This newly acquired knowledge and skill

has allowed us to reshape the ball and socket to allow for a more perfect fit. We are also able to repair tears in the labrum or replace the labrum if it is not salvageable. Even small areas of cartilage damage may be repaired arthroscopically.

Although the field of hip arthroscopy is relatively new, we do have some collective results on patient outcomes both nationally and worldwide. We have demonstrated that hip arthroscopy is successful in improving patient function and pain. Studies show that repairing the labrum works better than debriding or just "cleaning it up" with regard to achieving more lasting pain relief and preventing further progression of arthritis. We see hip arthroscopy patients recover faster than those patients who have the same procedure done with open surgery. We know that it is imperative to treat not only the symptoms of hip pain (the labrum) but also to treat the underlying cause of the pain (which is the shape of the ball and socket).

The most critical factor in the success of hip arthroscopy is treating the hip prior to any significant cartilage damage. It has been well demonstrated that patients have significantly better results with hip arthroscopy when they have little or no cartilage damage. There is a clear threshold to the amount of cartilage damage that can be successfully treated arthroscopically. After that critical point is reached, the only successful solution to treat hip pain and dysfunction is a hip replacement.

We do not yet have complete data that shows we are changing the natural course of hip arthritis through hip arthroscopy. However, it is clear that early repair of the labrum and cartilage damage done in conjunction with reshaping of the ball and socket improves hip joint mechanics likely protecting the hip cartilage over time. The emerging technology in the field of hip arthroscopy is the best method we have to preserve the hip over the course of time.



Tim Greene, MD

6th Annual Golf Outing “Tee-off” Cocktail Party

ONSF in conjunction with Greenwich Hospital held a pre Golf Outing “Tee-Off” cocktail party for golfers, donors and sponsors on Thursday, April 24th at the spectacular Ferrari/Maserati showrooms of Miller Motorcars. Over 70 guests wandered among the fabulous automobiles and enjoyed a wine tasting of superb California selections presented by Horseneck Wines.

Golf Outing Co-Chairs, Dr. Michael Clain and Vicki Leeds Tananbaum, were joined by Rebecca and Dave Karson, Joan Lunden and Jeff Konigsberg, Angela Tammaro, Casey and Barb McKee, Paul Tramontano, ONSF President Dr. Paul Sethi and his wife, Amy, Lauren and David Mazzullo and many other Foundation friends.

The 6th Annual Golf Outing will be held on Monday, June 9th at Stanwich Club.



Rebecca Karson and Lauren Mazzullo



Meet Our Board

Paul E. Tramontano



Paul is the Co-Chief Executive Officer and a founding member of Constellation Wealth Advisors LLC and serves on both the investment and executive management committees. Prior to forming Constellation, Paul spent 17 years at Citi Smith Barney, most recently as a Managing Director and Senior Advisor of Citi Family Office. His

career began at Merrill Lynch in 1983.

As a recognized thought leader in the industry, Paul lends his expertise to industry publications, conferences and panels. *Barron's* has consistently selected Paul as one of the top wealth advisors in America since 2004; he was recognized in the top fourteen in 2013.

He currently sits on the Board of Associates at the Whitehead Institute, a biomedical research organization at MIT, and has served on the NY Stock Exchange Hearing Board for more than 15 years. Paul graduated from Villanova University with a Bachelor of Science degree in Accounting. He has been actively involved with the Greenwich Audubon and Villanova University as an alumnus.

Paul lives with his wife and two daughters in Greenwich, Connecticut. He and his family are strongly committed to charity and community.

Angela E. Tammaro



Angela Tammaro has dedicated her life and career to youth sports with an emphasis on sportsmanship. She served as Greenwich Academy's athletic director, coach and mentor to hundreds of girls for more than four decades and during that time became one of the most successful high school coaches in the nation. She accumulated 746 field hockey victories, 700 lacrosse wins and over 200 basketball wins. In addition, G.A. teams won 29 FAA Field Hockey titles, 28 FAA in Lacrosse, 5 New England Field Hockey titles (5 runner up) and 8 NE Lacrosse titles.

Angela is a member of the National Field Hockey Coaches Association Hall of Fame, the Connecticut Field Hockey Hall of Fame and a recipient of the National Field Hockey Coach of the Year Award. Angela was also inducted into the U.S. Lacrosse Hall of Fame and Connecticut Lacrosse Hall of Fame. In 2008, the Fairfield County Sports Commission named her as one of its Sports Persons of the Year.

After graduating from Boston University with a B.S. in Physical Education, Angela continued her studies at the University of Bridgeport where she earned a M.S. in Education. She resides in Greenwich, travels extensively, is an avid golfer and runs a summer field hockey camp at Greenwich Academy.

What is Concussion ‘Baseline’ Testing?

by Patricia McDonough-Ryan, PHD

When an athlete sustains a concussion, he/she can experience a *temporary* change in physical abilities such as balance and vestibular functioning, cognitive



Patricia McDonough-Ryan, PHD

functioning, emotional being, and sleep disturbance. Research indicates that the severity and duration of these changes depends on how quickly the injury is diagnosed, the individual athlete and his/her risk factors (e.g., prior concussions, neurological vulnerabilities, learning or attention deficits, mental health concerns), how well the concussion is managed, and the power of reassurance and knowing the symptoms will improve. It is best to think of

concussions as snowflakes: no two athletes share the exact same vulnerabilities or symptom outcome. The majority of concussion symptoms, however, resolve within a couple of weeks and kids return to activities within a few weeks.

The purpose of a ‘baseline’ is to characterize an athlete’s physical, cognitive, emotional, and sleep functions in the absence of being concussed and to use this data for comparison purposes to treat the athlete in the event of a concussion. Establishing a ‘baseline’ originated in professional level contact sports and has trickled down to younger athletes. Unfortunately, most parents and coaches recognize cognitive testing as synonymous with ‘baseline testing’ and imPACT testing in particular. The research on the utility and reliability of baseline cognitive tests and computerized imPACT for managing concussions is very inconclusive and needs to be approached with caution in teenage and younger athletes. It is important to recognize:

1. We are dealing with a developing brain, which means that physical abilities such as balance, cognitive

functioning, emotions, and sleep patterns are rapidly changing and any ‘baseline’ is simply a ‘snapshot’ of where a child/teen is in his/her development. As such, cognitive measures that were designed for adults, such as computerized imPACT testing, are not necessarily appropriate for children. In fact, there is insufficient ‘normative data’ for the imPACT test for middle school and younger athletes.

2. A ‘baseline’ measure is only as good as the circumstances in which it is collected. The utility of an individual, supervised assessment that controls for distractions and environmental variability far outweighs that obtained in a large group or unsupervised assessment. High School Athletic Trainers are an integral part of looking at baseline cognitive tests to ensure they are appropriately obtained and valid.
3. Certain computerized ‘baseline’ cognitive measures are not appropriate for children with a history of learning or attention difficulties, mental health concerns or those who have sustained multiple prior concussions. It is very important that a qualified pediatric neuropsychologist is involved in managing these children who have higher risk factors that may complicate their recovery.
4. One of the greatest assets of obtaining a ‘baseline’ assessment is that it helps create a greater awareness of what a concussion is and the symptoms that should be monitored. A qualified concussion expert can manage a concussion in the absence of a ‘baseline’. These experts know how to ask the right questions of pre-injury functioning, assess, and treat appropriately.
5. Always remember that any computerized cognitive ‘baseline’ test such as imPACT is ONLY ONE piece of information in a clinician’s management of a concussion.

**For more information on concussion awareness and prevention
visit the ONSF website—www.ons-foundation.org
or the Centers for Disease Control and Prevention website — www.cdc.gov/concussion**



6 Greenwich Office Park, Suite 100
40 Valley Drive
Greenwich, CT 06831

Phone: 203.869.3131
Fax: 203.485.8705
Email: contact@ons-foundation.org
Web: www.ons-foundation.org



WE SAW THE NEED, PLEASE HELP US MEET IT...

To donate online, visit www.ons-foundation.org or complete the attached form. We look forward to keeping you informed about our progress, successes and exciting future events.

Enclosed is my tax deductible donation in the amount of:

☐ \$100 ☐ \$150 ☐ \$250 ☐ \$500 ☐ Other \$ _____

Name: _____

Address: _____

Phone: _____ **Email:** _____

☐ I am enclosing a check made out to the **ONS Foundation for Clinical Research and Education, Inc.**

☐ Please charge my ☐ Visa ☐ MasterCard ☐ American Express

Card Number: _____ **Expiration Date:** _____

Thank you for your generous support!