Orthopaedic Science in Motion

On May 24th, the Orthopaedic Surgery Department hosted Orthopaedic Science in Motion, an event for community members and friends of the department. Guests enjoyed a behind-the-scenes experience with researchers at the UC San Diego Musculoskeletal Research Lab. The evening kicked off with an outdoor cocktail reception, entertainment and inspiring remarks from Distinguished Professor and Department Chair Steven Garfin, MD; Professor, Vice Chair and Co-Director of the Musculoskeletal Research Lab, Richard Lieber, PHD and former NBA all star and grateful patient, Bill Walton. Attendees were then afforded a rare and unique opportunity to explore the research laboratory. Not typically open to the public due to sterility issues related to gene research studies, guests were provided lab coats and received a private, hands-on interactive tour. Faculty and students gave presentations on current research being done to discover treatments for musculoskeletal issues, such as back pain, transplantation, cerebral palsy, spinal cord injury, and muscular dystrophy. Musculoskeletal Disease accounts for nearly 70% of doctor visits. This event helped showcase UC San Diego’s Department of Orthopaedic Surgery’s’ cutting edge research.
Along with the longer days and warmer weather, summer brought many changes... graduates (residents and fellows) moving on to new endeavors and new residents and fellows joining our Department. While we are always a little melancholy to see our residents and fellows graduate, we also welcome and look forward to our new ones.

Additionally, we have new faculty joining our great team with the arrival of William Bowman, MD in Orthopaedic Oncology, Marc Chodos, MD and Sophia Deben, MD in Foot and Ankle and Jeffrey Chen, MD in Physical Medicine and Rehabilitation. We are also pleased that in September, Christopher Wahl, MD, coming to us from the University of Washington, will lead our Sports Program and direct us in becoming a destination location for Sports Medicine.

We are excited to share the news that we have moved into North County with a new Orthopaedic practice facility in Encinitas providing our North County and coastal communities excellence in Orthopaedic care.

In May, we had a great “behind the scenes” event at our Research Lab on campus with interactive-demonstrative tours showcasing our scientific discoveries in Orthopaedic medicine/surgery to improve musculoskeletal treatments and understanding for health and wellness. Special guests Bill and Lori Walton attended and Bill volunteered to speak. He was poignant, touching, and enthusiastic in sharing his story of hope for those who suffer from severe back/spinal pain, and other Orthopaedic conditions.

I am pleased to announce that the UCSD Wayne Akeson Visiting Professor for 2012, joining us Tuesday, November 13th and Wednesday, November 14th, will be Lewis Zirkle, MD. Dr. Zirkle specializes in trauma and started SIGN Fracture Care International to provide Orthopaedic care and surgical instrumentation to third world countries and patients. We are looking forward to his taking part in this program named for Dr. Wayne Akeson, our first Department Chair.

Special milestones among our staff and students abound as you will see in the pages that follow. We hope you enjoy the articles and updates.

Sincerely,

Steven R. Garfin, MD
Distinguished Professor and Chair

Save-The-Date...for the AAOS Conference

All Department of Orthopaedic Surgery Alumni, mark your calendars and plan to join your friends and colleagues Thursday evening, March 21, 2013 for the UC San Diego Department of Orthopaedic Surgery Alumni Reception at the AAOS Conference in Chicago. This hors d’oeuvre and wine reception will take place from 6-9pm in the Signature Room atop the 95th floor of the John Hancock Building. Centrally located in the heart of downtown Chicago, on Miracle Mile, this venue boosts the best views and fare in the “Windy City”. We look forward to seeing you all next March!

Formal invitation will follow
2012 Chief Resident Graduation

Salil Upasani, MD
Medical School: UC, San Diego School of Medicine
Fellowship: Pediatric Orthopaedic Surgery
Boston Children's Hospital (Harvard)
Boston, MA

Timothy Neuschwander, MD
Medical School: University of Southern California
Fellowship: Sports Medicine
Santa Monica Orthopaedic Group
Santa Monica, CA

Brooke Ballard, MD
Medical School: University of Illinois
Fellowship: Hand and Upper Extremity
University of Florida, Gainesville
Gainesville, FL

2012 Graduation Dinner
Introducing our New Sports Medicine Chief, Chris Wahl

UC San Diego Health System’s Department of Orthopaedic Surgery is proud to announce that Christopher Wahl, MD has accepted the position of Associate Professor and Chief of Sports Medicine. Dr. Wahl comes to us after spending eight years at the University of Washington, serving as team physician for UW football, men’s basketball, volleyball, softball, gymnastics and tennis, among other sports.

In addition to his passion for treating elite and recreational athletes, he has developed a special interest and national reputation for his treatment, innovations and study of high-energy, complex knee and shoulder injuries. His expertise also includes multiple-ligament knee reconstructions, cartilage restoration and repair, periarticular fractures, meniscus procedures, rotator cuff and shoulder instability repairs. Dr. Wahl’s research interests include:

- Clinical outcomes research and innovations in the treatment and rehabilitation of multiple-ligament knee injuries and knee dislocations
- Basic science/clinical research in anatomic factors that predispose to soft tissue and ligament injury and prevention
- Development of surgical techniques and approaches for the treatment of shoulder instability, complex knee injury, and cartilage transplantation

Dr. Wahl attended medical school and completed his residency training at Yale University. He completed a sports medicine and shoulder surgery fellowship at the Hospital for Special Surgery in New York, one of the top-ranked orthopedic hospitals in the United States. Dr. Wahl then took a three-month trauma fellowship in Germany and Switzerland as an A.O. John Border Traveling Trauma Fellow.

In 2011, he was selected as a traveling Orthopaedic fellow for the American Orthopaedic Society of Sports Medicine and spent five weeks touring prestigious sports facilities and hospitals in South America. Dr. Wahl has a national reputation as a skilled surgeon, inspirational teacher, and compassionate doctor. He has been named a US News and World Report “Top Doctor” in Orthopaedics and sports medicine surgery.

Outside of his clinical and academic responsibilities, Dr. Wahl enjoys sailing, cycling, skiing, many outdoor sports, and music with his wife, Suzanne and their three children. He is looking forward to joining the team at UC San Diego and becoming part of the active San Diego community.
New UC San Diego Faculty

William E. Bowman, MD
Orthopaedic Oncology

Marc Chodos, MD
Foot and Ankle

Jeffrey L. Chen, MD, MHS, MS
Physical Medicine and Rehabilitation

Sophia Deben, MD
Foot and Ankle

UC San Diego welcomes you!

Incoming Spine Fellows 2012-2013

Seth Grossman, MD
Medical School: Thomas Jefferson University, Jefferson Medical College
Residency: University Hospital for the Albert Einstein College of Medicine

Behnam Salari, DO
Medical School: University of Medicine and Dentistry of New Jersey, School of Osteopathic Medicine
Residency: University of Medicine and Dentistry of New Jersey, School of Osteopathic Medicine, Department of Orthopaedic Surgery
Incoming Pediatric Orthopaedics Fellows 2012-2013

Brian Scannell, MD  
Carolinas Medical Center  
Charlotte, NC

John Kemppainen, MD  
Summa Health Systems  
Akron, OH

Christopher Souder, MD  
Scott and White Memorial Hospital  
Temple, TX

Avrum Joffe, MD  
St. Luke’s Roosevelt Hospital  
New York City, NY

UC San Diego welcomes you!

Incoming Trauma and Hand Surgery Fellows 2012-2013

Erin Farrelly, MD  
Trauma Fellow  
Medical School: George Washington University  
Residency: Albert Einstein College of Medi-

Arush Patel, MD,  
Hand Surgery Fellow  
Medical School: University of Toledo  
Medical Center, Toledo, OH  
Residency: Los Angeles County University of Southern California Medical Center
Doctor’s Corner Featuring Natalie Voskanian
Bone Health: Things to Know

Bone health can impact us in so many ways. A stress fracture in a competitive athlete can be season-ending. An osteoporotic fracture of the hip can be debilitating and lead to irreversible health implications. It is important to think about bone health early on in life to maximize chances of having healthy bones down the road. It is estimated that 50 year old women have a 50% lifetime risk of developing an osteoporotic fracture. Though post-menopausal women are the most at risk for osteoporosis and men experience fractures less often than women, men’s mortality associated with a hip fracture is 2x higher than women in the first year following a hip fracture. Interestingly, about 40% of men who have osteoporosis have no known risk factor and it tends to occur later in life.

Bone mineral density (BMD), or bone mass, is one of many factors involved in the creation and maintenance of healthy and strong bones. It happens to be the best understood one and the simplest factor to measure. Another important contributor to healthy bones is bone mineralization, the ability to form an organic matrix in bone. Vitamin D is a key player in bone mineralization. Insufficient levels are associated with a 30-fold increase risk for fracture; it can also lead to rickets in children and osteomalacia in adults. Another important factor for bone health is bone remodeling. For instance, Paget’s Disease is a disease of bones that involves bone pain and deformity and is the consequence of disordered bone remodeling.

Bone mineral density (BMD) provides an objective way to measure bone mass and has clearly been shown to correlate with risk for fracture. It is determined by a variety of factors, including genetics, age, medical issues, medications, hormones, lifestyle, and nutrition. BMD accumulates during childhood and continues to increase into our 20’s. It reaches peak levels in our 30’s, at which point bone break down increases and BMD begins to fall.

Osteoporosis refers to a BMD level that is at a significantly increased risk for fracture. Osteoporosis can go undiagnosed without sufficient screening. Sometimes it doesn’t get recognized until an individual has an insufficiency fracture or obtains an X-ray. It is estimated that by the time osteoporosis is detected on a regular X-ray, 30-40% of BMD has already been lost.

The DXA (Dual Energy X-ray Absorptiometry) scan is the gold standard for measuring BMD and has been shown to correlate with fracture risk. All women starting at 65 and men at 70 years old should have their BMD checked via a DXA scan. Individuals 50 and older with a risk factor should also have it checked. BMD is measured by T-score in individuals >50, though in younger individuals the Z-score is more accurate. A T-score between -1 and -2 is considered osteopenia and prevention should be initiated at this level. Treatment should be initiated starting at T-score of -2; it typically involves bisphosphonate medications which help prevent bone reabsorption (ie breakdown). Osteoporosis is defined as T-score of -2.5 and below. The primary goal is to prevent getting to that stage.

Factors that decrease BMD and therefore are risk factors for the
development of osteoporosis include the following: smoking, excessive alcohol intake, seizure medications, oral corticosteroid use (such as prednisone), chemotherapy, thyroid disease, rheumatoid arthritis, chronic lung disease, hyperparathyroidism, malnutrition, malabsorption, and cushing’s disease. Other important risk factors include low body weight and family history of osteoporosis.

Prevention of osteoporosis and active maintenance of good bone health includes a diet rich in calcium and vitamin D. Good sources of calcium include dairy products (milk and yogurt), dark green leafy vegetables (like spinach), canned salmon or sardines, soy products like tofu, and also calcium fortified cereals and orange juice. Sunlight is the best source of vitamin D but needs to be balanced with skin protection.

“Regular, consistent exercise with high impact or weight-bearing helps maintain and increase bone mineral density. “

Foods with high vitamin D content include green leafy vegetables, cod liver oil, fish, fortified cereal and orange juice, and eggs. Regular consistent exercise with high impact, or weight-bearing, helps maintain and increase bone mineral density. It can also help with coordination, balance, and strength to reduce the risk of an injury that could result in fracture. Exercise should include both cardio and strength components to maximize health benefits, and should be done at least 30 minutes, four times a week. Examples of weight-bearing exercises include stair climbing, brisk walking, jogging, jumping rope, and skiing. Examples of good weight-bearing sports include basketball and volleyball, followed by tennis and soccer. Swimming, cycling, and elliptical do not provide sufficient weight-bearing to help with BMD, though they are good for cardiovascular health.

Pre-menopausal women and men <50 can be at risk for low bone mineral density as well, though this occurs less often. In this age group, low BMD may result from hypogonadism (such as from surgical ovary resection in females or low testosterone in males) or from insufficient calorie intake to balance out activity level. For instance, in a highly active athlete who participates in intense sports activities many hours a week, insufficient calorie intake can lead to energy imbalance which causes a catabolic state, decreased estrogen secretion (in females), insufficient vitamin/mineral intake, and resulting decrease in bone mineral density. In females, the first sign of this can be irregular periods. In this age group, a Z-score less than -1 is considered abnormal. A Z-score between -1 and -2, along with a risk factor, is considered low BMD. Osteoporosis is Z-score of -2 and lower. Therefore, in young athletes, exercise should be balanced with sufficient calorie intake and sufficient rest between exercise periods to allow for bone and body recovery. And irregular periods should be evaluated by a physician.

The bottom line is that our bones are an important part of our overall health. Keep your bones strong and healthy by making sure you have sufficient vitamin D and calcium intake, and maintain a healthy exercise regimen that includes both strengthening and weight-bearing (in addition to cardio for overall health). Make sure you and your loved ones get age-appropriate and medical condition-appropriate screening so that you can prevent problems down the road and get treatment if needed.
Congratulations...

Tim & Jennifer Neuschwander’s daughter, Annika Neuschwander, born 9/10/11

Michael & Leslie Linn’s daughter, Yael Linn, born 11/10/11

Zach & Nicole Ongwijitwat’s daughter, Audrey Ongwijitwat, born 11/28/11

Katie and Orrin Franko’s September 4, 2011 wedding

Salil & Priya Upasani’s daughter, Siona Upasani, born 11/28/11

Geri and Chuck Chang’s June 18, 2011 wedding
World-class care comes to North County

UC San Diego Health System’s Department of Orthopaedics is now in Encinitas! We are going the extra mile to bring our widely recognized patient care, research and discovery to those without convenient access to our La Jolla or Hillcrest campuses. Our beautiful, new clinic location is conveniently situated for North County patients seeking top quality health care in their own neighborhood. Our orthopedic and sports medicine providers are taking new patients – give us a call!

The UC San Diego Department of Orthopaedic Surgery is growing and we invite you to join us during this exciting time. We are working to build our programs which include innovative research and excellence in clinical care. The continued success of this growth relies on philanthropic support from people like you who care to make a difference for Orthopaedics and Musculoskeletal medicine. Additionally, we want to keep you up to date regarding our department’s achievements, projects, and events.

If you would like to take part in supporting the future of Orthopaedic Surgery at UC San Diego please contact Shawna Fallon, Director of Development at (858) 246-1553 or shfallon@ucsd.edu.

If you would like to opt out of receiving this newsletter, please contact Natasha Montazeri in the UC San Diego Development Office.

namontazeri@ucsd.edu