



Connections 2014



A Newsletter from the Children's Orthopedic
and Scoliosis Training Program
Rady Children's Hospital and University of California – San Diego

Mubarak	Wenger	Chambers	Newton	Wallace		
						
Connections Issue 10 – 2014						
		Pring	Yaszay	Edmonds	Pennock	Upasani

Index	
National Ranking	3
Fellows	4
AAOS Humanitarian Award	8
New Staff/New Center	10-11
Research	12-13
Specialty Teams	14-17
Visiting Professor	18
Notes – Past Fellow	22
Activities	24
POSNA 2014	26
Publications	30
Spreading the Word	34

*Message from
the Director*

Dennis R. Wenger, M.D.

It's springtime and a good opportunity to assess the year's activities in our children's orthopedic center. The 2013-2014 academic year has been filled with change and growth as our center remains a world leader in children's orthopedic patient care, teaching and research.

Several changes have occurred over the last year to year

and a half which have been very positive for us. As was mentioned briefly last year, Dr. Peter Newton assumed the position as Director of the Orthopedic Division of the Children's Hospital Foundation, succeeding Dr. Scott Mubarak. He began this position on June 15, 2013 and is now well into his first full year of activities. He provides energetic leadership and is setting the standards for the next generation of children's orthopedic patient care, teaching and research. His internationally recognized scoliosis expertise, as well as his experience as Director of Research provides an important baseline for evolving into the new era.

As for research, Dr. Eric Edmonds has been named the new Co-Director of Research and will take over many of the formal man-

Message from the Director -continued



agement duties for research at Rady Children's Hospital/UCSD program (see p. 3). Of course, the program has great strength from our Orthopedic Research Program Manager, Tracey Bastrom, and her outstanding team (see p. 13).

As for our orthopedic teaching staff, Dr. Salil Upasani, formerly one of our UCSD residents who then trained in both advanced scoliosis and hip preservation surgery concepts at Boston Children's Hospital, has returned to be on our fulltime faculty. Salil has an outstanding research record and is interested in advanced methods for treating hip disorders in adolescents and young adults, as well as scoliosis. He recently attended the Bernese Hip Symposium to learn from international experts in this area regarding modern techniques for treating adolescents and young adults with hip disorders.

A major change in late 2013 included moving into our new third floor Orthopedic Center (just one floor below where our traditional orthopedic private offices were located)(see p. 11). Along with this change, we closed our hospital outpatient clinics (located next to the Emergency Department) and now all orthopedic outpatient care is consolidated in this center.

Overall, we have an outstanding clinical program with an excellent patient volume and an opportunity for the highest quality of orthopedic care, as well as education in children's orthopedics. As for orthopedic education, we continue to provide education at all levels. Our residents come from both UCSD, as well as the military training program in San Antonio and

the Naval Hospital here in San Diego.

In addition to our excellent Monday and Friday morning conferences, we now also have subspecialty conferences held during the week for the fellows which focus on five topics, including research, hip disorders, spine disorders, neuromuscular problems, as well as a sports and trauma conference.

Our fellowship remains among the most sought after in the world. Each year we produce outstanding fellows. Our fellows always have a job upon graduation, many before mid-year. We attribute this to a training program that allows the fellows to be given graded responsibility, including independent night call to care for urgent orthopedic problems. This allows our orthopedic fellow to immediately begin a busy children's orthopedics practice with all its responsibilities. In addition, we integrate our orthopedic resident and fellow education so that each group can be busy, avoiding competition between these two groups.

This year's Visiting Professor was Dr. Peter Waters, a professor of orthopedic surgery and Director of the Orthopedic Program at Boston Children's Hospital (see p. 18). He is an internationally recognized educator, as well as an expert and broadly published surgeon regarding upper extremity problems in childhood.

We look forward to the continued interest and support of our alumni and friends.

Dennis R. Wenger, M.D.
Director – Orthopedic Training Program

Continued Excellence

Rady Children's Hospital Ranked #3!



#3

The recently announced 2014-2015 US News and World Report ranking of children's hospitals has ranked Rady Children's Hospital San Diego as #3 in the U.S. for children's orthopedic surgery.

We continue to do well in this national survey because of our high quality and volume of clinical care and surgery, our outstanding research program with many resulting in publications, as well as our excellent residency and fellowship educational programs.

We congratulate everyone in our department and thank them for the dedication and hard work which are required to achieve this honor. We also thank our hospital leaders for their support.



Patient Care – Teaching – Research



Research Leadership

Rady Children's Hospital San Diego

As our program evolves, the next generation of leaders take their place.

Last year's newsletter clarified that Dr. Peter Newton has taken over as the Division Chief for Orthopedic Surgery in the Foundation of Rady Children's Hospital. He was selected for this position and took

over from Dr. Scott Mubarak in December of 2013 and clearly has taken the reins in what is now a very complex division with many activities including a huge clinical volume, a large surgery case load, an important educational component, as well as an extensive research program. Dr. Newton excels in management skills and is a good delegator; thus, he can get far more done in a day or week than one could reasonably expect.

In keeping with the delegation strategy, Dr. Eric Edmonds has been named as Director of Orthopedic Research at Rady Children's Hospital. Thus, the baton has been passed from Dr. Peter Newton to Dr. Edmonds who is gradually adopting the many responsibilities related to orthopedic research in childhood. Fortunately, we already have a strong team, and Tracey Bastrom, our research coordinator (see section in this issue), provides exceptional leadership and partnership with Dr. Edmonds and our entire faculty and research team. We look forward to a continued outstanding research program.

2013-2014 Fellows - Rady Children's Hospital

The RCHSD/UCSD fellowship program in children's orthopedics and scoliosis surgery remains among the most sought after in North America. The balance of training that our fellows receive covers all areas of children's orthopedics as well as providing excellent research possibilities. In addition, we arrange for our fellows to be responsible for primary call several nights each month, under the supervision of a senior staff, which allows them to develop independent decision making skills. Recent national analysis of surgical training in North America suggests that more graded responsibility needs to be given to senior trainees and fortunately we have been able to incorporate this into our program. We are proud of our fellows who are graduating this year and we congratulate them on their accomplishments.



Matt Hollenbeck, M.D.

Matt earned a BS in Biology, Magna Cum Laude from Rockhurst University, Kansas City, followed by a Masters Degree in Physical Therapy. He then earned his medical degree at the University of Kansas Medical School followed by his orthopedic residency which he completed at Greenville, South Carolina in June of 2013. Matt's research this year has focused on electronic medical record as well as scoliosis surgery in patients with cerebral palsy. Upon completion of his fellowship he will return to Kansas where he will be the pediatric orthopedic surgeon for the Kansas Orthopaedic Center in Wichita.



Jonathan Peterson, M.D.

Jon attended Northwestern University for his undergraduate education, earning a BA in Biological Sciences and Economics, Magna Cum Laude. He received his M.D., from University of California, San Diego School of Medicine and then completed his orthopedic residency at the University of Iowa. Jon has written two papers during his fellowship year that have focused on his research on the development of the normal hip. Following his fellowship, Jon will move to Fargo, North Dakota where he will be developing the Pediatric Orthopedic Department at Sanford Health.

When you know a thing, to hold that you know it, and when you do not know a thing, to allow that you do not know it: this is knowledge

– Confucius

2013-2014 Fellows - Rady Children's Hospital



Lee Phillips, M.D.

Lee attended Texas A&M where he earned his BS in Biomedical Engineering, Cum Laude. He then received his medical degree from the University of Texas – Houston, and went on to complete his orthopedic residency at the University of Utah. Once Dr. Phillips has completed his San Diego fellowship year, he will travel back to Texas for additional training in pediatric hand and upper limb surgery at the Texas Scottish Rite Hospital Seay Hand Center in Dallas. While in San Diego, his research interests have included extra-articular drilling of osteochondritis dissecans of the talus, proximal tibia physeal fractures, and Lenke 5 scoliosis curves. Following his fellowship training he will take a staff position with the Children's Orthopedic group at All Children's Hospital in St. Petersburg, FL.



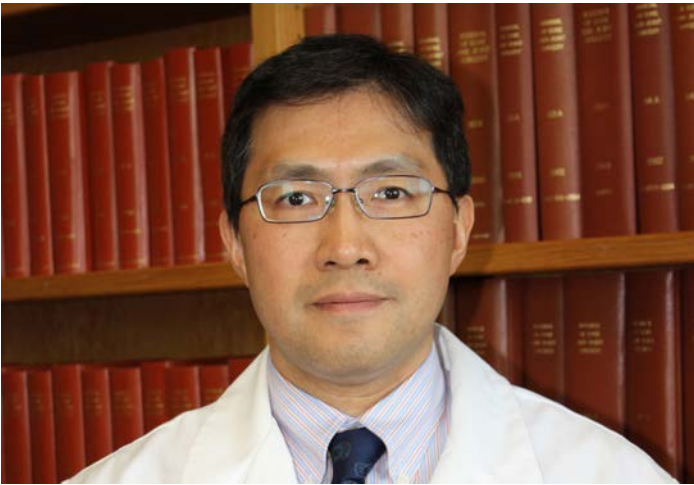
Lissette Salgueiro, M.D.

Lissette attended the University of Puerto Rico as an undergraduate, where she earned her BS in Biology, Summa Cum Laude. She received her medical degree and completed her orthopedic residency at the University of Puerto Rico School of Medicine. Her research interests this year have included the evaluation of risk factors associated with delayed healing in lateral condyle fractures and the association of genetic disorders and bilateral hip dislocations. She has also written a surgical technique for distal tibio-fibula synostosis excision. Following her fellowship she will return to Puerto Rico as a staff physician at Puerto Rico Children's Hospital.



2013-14 orthopedic fellows with Peter Waters, the 2014 Visiting Professor.

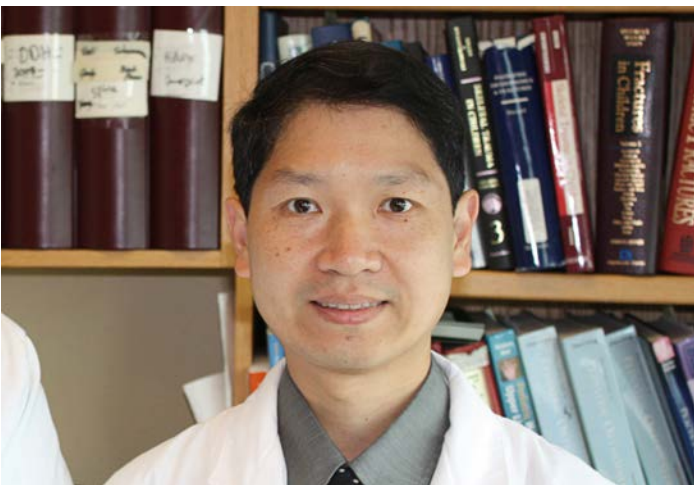
2013-2014 International Fellows



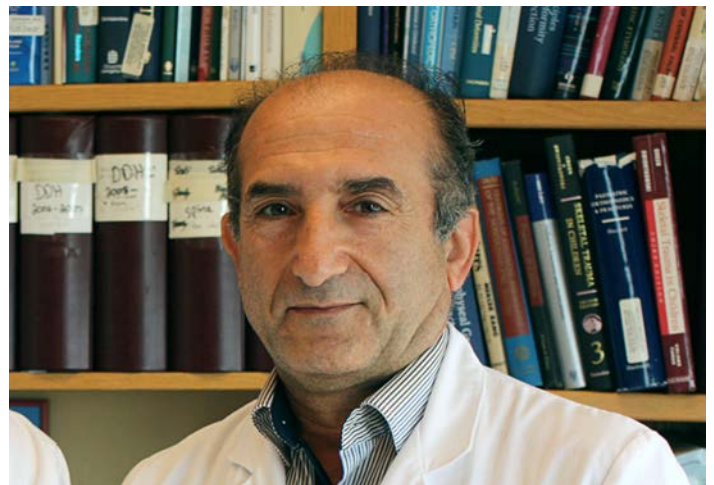
Yong Kim, M.D., Ph.D.
Scoliosis and Spine Deformity (Intl.)
Tokyo, Japan
September 1, 2013 – August 30 2014

International Fellows

Because of our growing national and international influence, our orthopedic education program continues to educate fellows who come from throughout the world to study modern treatment methods for scoliosis, hip disorders, cerebral palsy, and other children's orthopedic conditions.



Chi Ming Fong, M.D.
Children's Orthopedics and Sports (Intl.)
Kowloon, Hong Kong
September 1, 2013 – November 30, 2013



Saeid Tabatabaei, M.D.
Children's Orthopedics and Hip (Intl.)
Ahvaz, Iran
July 15, 2013 – September 15, 2013

Arriving International Fellows (2014-2015)

Tony Huang, M.D. (Taiwan)
Cerebral Palsy and Hip
July 1, 2014 – January 31, 2015

Zhou Chunguang, M.D. (Chengdu, China)
Spine
September 1, 2014 – January 31, 2015

Arriving Fellows - 2014-2015

The process of applying, interviewing, and then being accepted for one of the top-ranked fellowship programs in children's orthopedics is a demanding process. Each year we receive 40-50 applications and narrow this down to a smaller group that we can interview and then select the very best of those candidates. The fellows listed below will arrive August 1, 2014 to begin their academic year. These are all outstanding young surgeons from throughout North America and we look forward to working with them.



Imraan Ahmed, M.D.



Joshua Murphy, M.D.



Andrew Pytiak, M.D.



Matthew Stepanovich, M.D.

Imraan Ahmed, M.D.

Imraan earned a BS in Biomedical Engineering with an emphasis on chemical engineering from Johns Hopkins University. He then earned his medical degree from New York University School of Medicine in 2007, followed by completing his orthopedic residency at Brooke Army Medical Center. He has been an active duty military staff orthopedic surgeon since then, serving in Germany, Tanzania, Korea, and Afghanistan. He is currently a staff orthopedic surgeon at Landstuhl Regional Medical Center in Landstuhl, Germany.

Joshua Murphy, M.D.

Joshua earned a BS, Cum Laude, in International Business Administration and Management Information Systems from Alderson-Broadus College in West Virginia. He earned his medical degree from West Virginia University School of Medicine and will complete his orthopedic residency at the Atlanta Medical Center in June 2014.

Andrew Pytiak, M.D.

Andrew earned a BS, Cum Laude, in Bioethics, followed by a masters degree in Molecular, Cellular and Developmental Biology from the University of Michigan. He earned his medical degree from Wayne State University School of Medicine and will complete his orthopedic residency at Detroit Medical Center/Providence Hospital in June of 2014.

Matthew Stepanovich, M.D.

Matthew earned a BS in Health Sciences from Grand Valley State University in Allendale, Michigan. He earned his MD from Michigan State University, College of Human Medicine followed by his orthopedic residency at the Naval Medical Center Portsmouth which he will complete in June of 2014.

Future Fellows (2015-2016 Academic Year)

We are proud to announce that we have matched with the outstanding residents listed below.

Keith Bachmann, M.D.
Cleveland Clinic

David Lazarus, M.D.
Emory University

Corey Fuller, M.D.
Loma Linda University

Matthew Ellington, M.D.
Scott and White Hospital
Texas A&M Health Science Center



*Former Children's Orthopedic Fellow
Awarded AAOS International
Humanitarian Award*

Scott Nelson, MD – Loma Linda, CA (Fellow – 2003)



Dr. Nelson and family – Dominican Republic.

We were delighted to find that Scott Nelson, M.D., a former Loma Linda University orthopedic resident and then a fellow at Rady Children's Hospital, San Diego was awarded the American Academy of Orthopedic Surgeons Humanitarian Award at the March 2014 AAOS Meeting in New Orleans. Dr. Nelson received this award because of his immense dedication to helping children with orthopedic problems in underserved populations.

After finishing his fellowship here, he spent five years at the CURE Hospital in Santo Domingo, Dominican Republic and developed an outstanding clinical program, as well as a center that trains orthopedic residents from throughout North America and the world. Many of our staff have had the opportunity to visit Dr. Nelson there and to help him in this program.

After his five-year stint there, he returned to Loma Linda University where he is the Director of the children's orthopedics service. During Dr. Nelson's five-

year medical mission in the Dominican Republic, he made more than 30 trips to Haiti, which has a tremendous need for children's orthopedics expertise. He happened to be at his hospital in Santo Domingo when the earthquake news came out and was able to get a local pilot, who had previously flown him into Haiti, to take him immediately to Port-au-Prince. He was one of the very first North Americans to actually enter Port-au-Prince in the dire state of emergency following the massive earthquake that eventually killed 250,000 people.

By the time their plane reached Port-au-Prince, the airport had been officially closed and hundreds of rescue planes from other organizations throughout North America and the world were turned away. Dr. Nelson, due to his previous commitment to the Adventist Hospital in Port-au-Prince and his connections through his Dominican pilot, was able to land amidst this radical disorder and immediately set up a triage orthopedic system in the Adventist Hospital. He organized the entire emergency service, including directing orthopedic surgeons and others who eventually were able to get into the country to help.



Dr. Nelson and Dr. Wenger in Dominican Republic.



Dr. Nelson tending to a patient in Haiti.

As was noted in the AAOS Now editorial describing Dr. Nelson's efforts, he was in the hospital 24 hours a day for six days and six nights with very little sleep. He had a small cot to sleep on in a small room. However, when more senior surgeons came from the USA, he would give up his cot and then often was found sleeping on the cement floor in a nearby closet.

Dr. Nelson has a long family history of dedication to helping those who are underserved in medicine. His surgeon grandfather, who also graduated from Loma Linda University in the mid-1930's, served in the Belgian Congo for more than 20 years of his surgical career. These senior role models have always inspired Dr. Nelson to put the interest of others above those of his own. Spending five years in Santo Domingo with his wife and two young school children exemplifies this dedication.

While serving the Dominican, Dr. Nelson had many visitors as noted above and soon developed a training program for U.S. orthopedic surgical residents. This program is now accredited by the ACGME and as part of the program approximately 20 residents have completed formal rotations at the CURE International Hospital in Santo Domingo. In addition, Dr. Nelson performed admirably as the Director of the orthopedic service at Loma Linda University Hospital.

We always knew that Scott Nelson was a special person. When he came as a fellow, we were told he would likely spend several years working as an orthopedic missionary doing international service, but very often this does not really happen. In his case, he moved his

lovely wife and children to Santo Domingo and completed the full five years.

Scott's mission did not "end" when he returned to Loma Linda. His continued dedication is exemplified by a recent phone conversation. We called him regarding an orthopedic issue. He answered promptly, the reception was clear, and we assumed he was on his iPhone, perhaps between clinic patients in Loma Linda. He was, in fact, in Port-au-Prince with a Loma Linda University Hospital structural engineer planning the expansion and improvement of the Adventist Hospital in Port-au-Prince. Local engineering knowledge from Loma Linda (California is the epicenter of American earthquakes) provided just the expertise that Dr. Nelson and colleagues needed in Haiti. Borrowing his skills, getting him to Port-au-Prince and getting him home safely typifies what Scott Nelson can do with seemingly little effort.

We are greatly honored to have this outstanding orthopedic surgeon represent both Loma Linda University and Rady Children's Hospital San Diego/University of California San Diego as an exemplary orthopedic citizen.



Dr. Nelson and a grateful patient.



New Children's Orthopedic Staff

V. Salil Upasani, MD



Priya and Dr. Salil Upasani and family.

As our practice grows, we continue to attract new and outstanding academic staff to join our faculty. These positions are highly competitive, and we now have a strong focus on young academically oriented children's orthopedic surgeons who not only will be excellent surgeons and teachers, but in addition will make a substantial contribution to our research and publication effort. Dr. Salil Upasani is exemplary of this type of recruit. Salil had his undergraduate training at UCLA in Los Angeles, followed by medical school and residency here at UCSD.

During the beginning of his residency, he had a two-year research stint where he was separated from clinical duties and allowed to pursue an extensive research experience which was based here at Children's Hospital in our biomechanics laboratory and scoliosis center. He was involved in many studies directed and coordinated by Dr. Peter Newton and others.

After his UCSD residency, he was selected for the highly competitive children's orthopedic fellowship program at Boston Children's Hospital, directed by Dr. James Kasser, with a special focus on both spine problems, as well as hip problems in the hip unit directed by Drs. Michael Millis and Dr. Young-Jo Kim.

Salil has an extensive clinical and research experience and was brought on our faculty to both continue our strong scoliosis clinical and research program, as well as to become a leader in our hip research and surgical treatment team. He will provide a special focus on the new field of hip preservation surgery and managing hip disorders in teenagers and young adults (see pages 16-17).

Dr. Upasani already has a busy clinical practice, which includes scoliosis patients and scoliosis surgery, but also works with Dr. Wenger and colleagues to expand the activities of the hip treatment team. Drs. Mubarak, Pring and Wenger focus on the younger child, with Dr. Wenger having a special interest in adolescents and teenagers. Dr. Upasani's main focus is the late adolescent, teenagers and young adults who have complex hip problems, including hip impingement syndromes, hip dysplasia and complex disorders such as coxa vara and avascular necrosis.

Dr. Upasani already has an incredible list of publications and research projects for a surgeon of his age and is rapidly expanding as he completes his first year on our faculty. We are happy to have Salil, Priya, and their family with us in San Diego.



Dr. Newton and Dr. Upasani.

New Orthopedic Center

Summer 2013

Rady
Children's Specialists
of San Diego
Orthopedic and Scoliosis Center



The "ribbon cutting"

July 2013 was a momentous time for the orthopedic program at Rady Children's Hospital San Diego. After functioning for many years as a dual clinic practice, with all postoperative cases and many other types of clinical problems being addressed in our orthopedic clinics near the Emergency Department in the Main Hospital building, it was determined that Orthopedics should have its own centralized center on campus.

Accordingly, a major plan was developed to move the entire orthopedic clinical/patient care enterprise to the



"What a great space"



Grand opening – Our many supporters

third floor of the Medical Office Building (just one floor below the orthopedic department/academic offices).

Once this third floor space became available, it was clear that Orthopedics and Physical Medicine would have enough activities to occupy the entire floor. After extensive planning, a grand opening was held in July of 2013, with the opening event noted in the enclosed photographs. We now have an entirely new center with six separate orthopedic clinics, each opening onto a segmented reception area.

We are delighted to be in this spacious new structure which facilitates our clinical and teaching program.

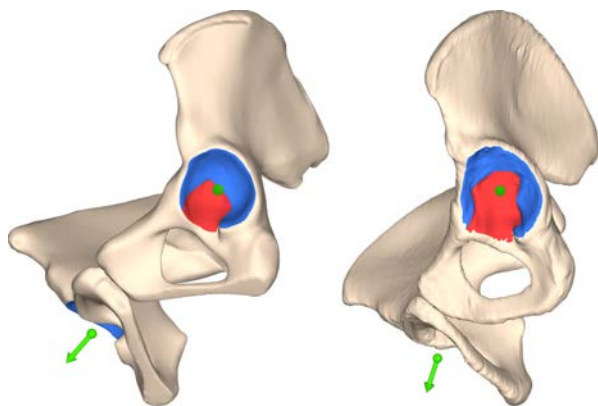
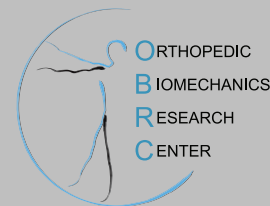


A great teaching environment



Orthopedic Biomechanics Research Center

Christine Farnsworth, MS and Josh Doan, MEng



Earlier this year, Diana Glaser, PhD left the OBRC and took up a new position in industry. We thank her for over four years of dedication to the OBRC. Moving forward, Christy Farnsworth, long time research associate with Rady Children's Hospital Pediatric Orthopedics, has overtaken management of the OBRC. Josh Doan, MEng remains as the OBRC engineering core staff and master of 3D imaging. The OBRC continues to move ahead to provide research support for staff physicians, fellows, residents, academic (UCSD) and industry collaborators.

The goal of the OBRC is to complement and advance clinical decision making and the understanding of orthopedic problems by applying sophisticated analytical techniques incorporated from multiple disciplines. To that end, over the course of the last year we have taken on projects that investigate treatment methods for: SCFE; fibula and clavicle fractures; medial patellofemoral and anterior cruciate ligament tears; as well as fusionless spinal growth modulation.

We continue to be heavily involved in three dimensional imaging, including conventional radiography, CT, microCT, MRI and EOS biplanar scanning (EOS Imaging) have provided a means to evaluate current assessment of medial epicondyle fractures, proximal humerus fractures, surgical treatment planning for ACL reconstructions in growing patients, spinal curve 3D morphology in adolescent idiopathic scoliosis to

optimize surgical planning and correction outcomes. We are also studying 3D visualization of growth sparing surgical techniques (growing rod techniques) for patients with early onset scoliosis, and detailed normal hip metrics have been collected to provide a normal database for comparison of pathological conditions. This groundwork is leading the way to allow for studies that provide an overlap of the two strengths of the OBRC, traditional biomechanical testing and 3D imaging and analysis.

Publications to the OBRC credit for the 2013-2014 year cover a variety of subjects and technical disciplines. One publication that highlights the collaboration between the OBRC and UCSD Department of Orthopaedic Surgery is:

- Loop securities of arthroscopic sliding-knot techniques when the suture loop is not evenly tensioned; Kim SH, Glaser D, Doan J, Chung SW, Choi HY, Oh JH, Hargens AR. Arthroscopy. 2013 Aug.

Collaborations with UCSD Department of Orthopaedic Surgery are developing and growing and we are very excited about the future and we look forward to more translational work together. As we strive to provide the best support for our clinical staff, the OBRC moves forward in translational work, using all possible tools available to provide information that will directly impact patient treatment options and improve quality of care provided.



Josh Doan setting up for a project.

Notes from the Research Team

Tracey Bastrom, MA – Orthopedic Research Program Manager



I hope that 2014 has started off as exciting and fruitful for you as it has for us. We started the year off with news that four of our research applications were selected for a grant awarded via Rady Children's Medical Practice Foundation, Department of Surgery. Drs. Chambers, Edmonds, Newton, and Pennock each had proposals accepted through this great resource. A month later we learned that Drs. Upasani and Yaszay were individually awarded POSNA research grants. We've got a busy year ahead of us but luckily we have a hard working team that is excited to put in the effort to complete these projects and advance the care delivered to children with orthopedic conditions.

The team has also been busy assisting our current fellows with their projects. Efforts are underway to finalize the projects and generate manuscripts for journal submission. A few highlights are as follows:

Matt Hollenbeck, MD evaluated the impact that the EMR has made on the efficiency of the orthopedic clinics, the completeness and accuracy of our orthopedic notes, and the ability to populate variables desired for specific research projects from the medical record.

Jon Peterson, MD worked closely with our 3D team to evaluate the normal morphology of the acetabulum. Specifically, they evaluated the surface area of the weight bearing portion of the acetabulum in males and females ages 12-17.

Lee Phillips, MD reviewed all cases of osteochondritis dissecans (OCD) of the talus that underwent primary arthroscopic drilling to evaluate the rates of radiographic healing and subsequently identify predictors of healing.

Lissette Salgueiro, MD examined 210 surgically treated lateral condyle fractures to identify the rate and risk factors for delayed healing and nonunion.

Team

We've had some big changes in personnel during the last year. Dr. Edmonds assumed the role of Director of Orthopedic Research. He is an insightful, creative, and organized leader – the entire team enjoys working with

him and we look forward to the future of the department under his direction and guidance. Kit Holm (our Finance and Contracts Manager) retired and Diana Glaser, PhD (former OBRC director) resigned to pursue a new opportunity. We wish them both the best as they start new chapters in their lives.

I'd like to continue the tradition of highlighting one of our team that many of you may not know. Aileen Laurente is one of our dedicated research assistants working behind the scenes to ensure quality data is gathered for our scoliosis registries. Aileen just celebrated 5 years with us in October. Her industrious efforts



Aileen Laurente

and perseverance consistently result in our follow-up rates being amongst the highest in the multi-center registry. She works very hard to ensure that the critical 80% follow-up at 2 years is met or exceeded for our adolescent idiopathic scoliosis registry patients. We are most appreciative of her incredible work ethic and devotion to our study patients.

Best wishes,

Tracey Bastrom, MA
Orthopedic Research Program Manager



Research team (L to R) – JD Bomar, Karen Littleton, Tracey Bastrom, Christy Farnsworth, Aileen Laurente, Carrie Bartley, Joanna Roocroft, Josh Doan, Rick Reighard.



Sports Medicine for the Young Athlete

Since opening its doors two years ago, 360 Sports Medicine has experienced great success and growth. Our continual objective is to provide young athletes coordinated medical, surgical, rehabilitative, and sports enhancement services with an ultimate goal of creating the premiere adolescent sports center in the West.

To date, 360 Sports Medicine remains the only dedicated pediatric and adolescent program serving San Diego and Imperial counties via educational outreach and expert care regarding the prevention and treatment of injuries in these young athletes. Our multidisciplinary team approach incorporates orthopaedic surgeons, non-operative sports medicine physicians, concussion specialists, physical therapists, physician assistants and nurse practitioners, neuropsychologists, and athletic trainers.

Over the last 12 months, we have hired 3 non-operative sports medicine physicians including Kenneth Taylor, MD; Suraj Achar, MD; and Yu-Tsun Cheng, MD to expand our reach within the community. Patient encounters for the sports program continue to rise with nearly 12,000 patient visits in 2013 of which 2,500 were seen at the new sports clinic that is immediately adjacent to the Children's main campus.



The physical therapy arm of 360 Sports Medicine is thriving with 3,500 patient referrals in 2013, up over a thousand from the previous year. A recent patient satisfaction survey conducted at the 7910 office found a 95% rate of families saying "Yes, definitely" (the highest rating) to the question asking if they would refer someone else to 360 PT, the highest percentage in the hospital survey. The therapists have also been making substantial outreach efforts to the community with a particular focus on sports injury prevention programs. Last year, the therapists began a series focused on ACL injury prevention, which has been well received by participants and their families.

A new addition to the 360 Sports Medicine program is our concussion service which is primarily managed by Dr. Andrew Skalsky, a rehabilitation medicine physician with a particular interest in concussion management. This program includes comprehensive analysis, neurocognitive testing with a newly hired neuropsychologist, and return to sport clearance. This program has already treated over 100 patients since its opening several months ago.

The sports medicine program continues to be directed by Hank Chambers and Eric Edmonds, while Andrew



Pennock, Doug Wallace, and Maya Pring play active roles in treating these young athletes. Surgical volumes continue to grow at a year-to-year rate of 15%; and, in 2013, 700 arthroscopic procedures were performed at Rady Children's Hospital San Diego.

It is an exciting time in adolescent sports medicine as multi-center study groups are developing around the country and research interest in the field of sports medicine is at an all time high. Hank Chambers has been instrumental in forming the PRISM (Pediatric Research In Sports Medicine) Study Group which had its inaugural meeting this past winter in Colorado. Many of the 360 staff are involved with other collaborative research efforts such as the ROCK (Research in OsteoChondritis dissecans of the Knee) study group, the FACTS (Fractures of Adolescent Clavicle Treatment Study) group, and PAPI (Pediatric and Adolescent Patellofemoral Instability) study group.

From a research perspective, the 360 sports group was quite productive in 2013, with 20 peer-reviewed publications and numerous presentations at international and national meetings on topics ranging from meniscus tears, hip impingement, osteochondral allografts, OCD treatment, patella instability, UCL injuries, and shoulder pathology.

We were also busy educating the lay public about sports injuries and their impacts via "Playing Safe," a monthly column in the San Diego Union-Tribune. To date we have provided over 45 articles to help the youth and their families learn about different sports injuries.

360 sports medicine

keeping young athletes in the game

360 Sports Medicine provides young athletes in the greater San Diego area coordinated medical, surgical, rehabilitative, preventive and sports enhancement services rooted in research and interprofessional clinical collaboration.

The 360 Team provides world class, cutting edge rehabilitation, training and care to young athletes. 360 promotes safe and rapid return to athletic endeavors while simultaneously maintaining the young individual's potential for a lifetime of musculoskeletal health.

EXPERIENCE THE 360 DIFFERENCE

Managing Athletic Injuries
Call 858-966-9360 ext. 1 to schedule an appointment with one of our board certified physicians who specializes in sports and orthopedic conditions. We have expedited scheduling to ensure athletes receive timely treatment for their condition in order to return to sport as quickly and safely as possible.

The 360 Sports Medicine Team

- Physicians
- Physical Therapists
- Nurse Practitioners
- Physician Assistants
- Sports Psychologists
- Concussion Specialists
- Athletic Trainers
- Exercise Specialists
- Massage Therapists
- Sports Nutritionists
- Rehabilitation Aides

360sportsmedicine.org

A PROGRAM OF
Rady Children's
Hospital
San Diego

San Diego Main Center 7340 Frost Street Suite 130 San Diego, CA 92123	San Diego 8000 Frost Street Suite 100 San Diego, CA 92123	Encinitas 477 N. El Camino Real Building D, Suite 303 Encinitas, CA 92024	Escondido 625 W. Citracado Pkwy Suite 204 Escondido, CA 92025	Solana Beach 667 San Rodolfo Drive Suite 205 Solana Beach, CA 92075	Oceanside 3605 Vista Way Suite 200 Oceanside, CA 92058
--	--	--	--	--	---

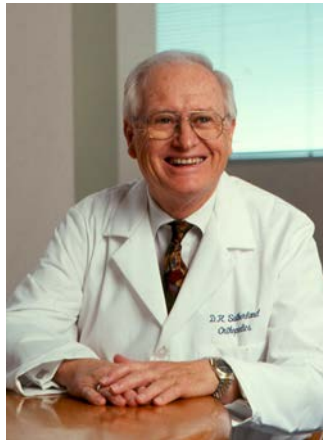


We look forward to continued growth and expansion into the community, and have many planned educational events over the next year for the pediatricians, athletic trainers, and physical therapists. Cornerstones of our mission will continue to be fellow and resident education, sports injury prevention, and sound clinical and basic science research.

Development of the Hip Team

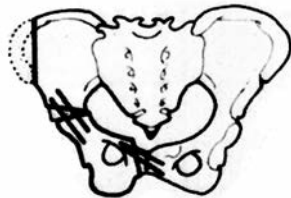
Rady Children's Hospital, San Diego/University of California, San Diego

Our interest and expertise in hip disorders of childhood has a long and distinguished history. Dr. David Sutherland, the founder of our academic children's orthopedic program, was best known internationally for his expertise in motion analysis and cerebral palsy, but also had a strong interest in hip disorders in childhood.



David Sutherland

Noting international interest in the development of a variety of acetabular osteotomies, he developed the double innominate osteotomy to treat childhood hip dysplasia. He served on faculties throughout the world explaining his philosophies and techniques regarding the treatment of residual hip dysplasia both in normal children and adolescents, as well as in children with cerebral palsy.



Sutherland Double Osteotomy

Dr. Scott Mubarak also has had a lifelong interest in hip disorders in childhood which started during his exposure to Dr. Sutherland during his residency here at UC San Diego. He then gained extensive further experience by working with the faculty at the Hospital for Sick Children in Toronto where he took his fellowship and learned from both Dr. Robert Salter and the other experts on hip disease in that center. After his return to San Diego, he became intensely interested in the early childhood hip and wrote one of the early important papers



Pavlik Harness

regarding the use of the Pavlik harness and particularly the shortcomings of when the Pavlik harness did not work properly or was misapplied by either a surgeon or a family.

The resulting publication is a landmark paper in the children's orthopedic world. Dr. Mubarak followed this by developing a special Pavlik harness that is safer and more effective in treating hip dysplasia. Development and improvement of this harness included worldwide education and experience including visiting the family and descendants of Arnold Pavlik of Czechoslovakia where the Pavlik harness was first developed.



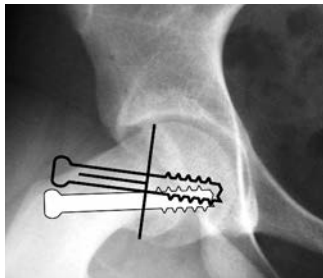
Hip ultrasound course

In addition, Dr. Mubarak became a North American leader in the use of diagnostic ultrasound for managing childhood hip dysplasia. He developed the first center in North America to be independently operated by orthopedic surgeons (independent from radiology) which follows the European model for the development and application of ultrasonography for the diagnosis and treatment of hip dysplasia.

Our center remains one of the few in North America that treats a high volume of hip disorders with the ultrasonography being coordinated and run by the orthopedic surgical team. Dr. Mubarak continues



San Diego Acetabuloplasty



Screw Head Impingement

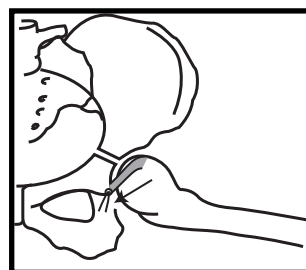
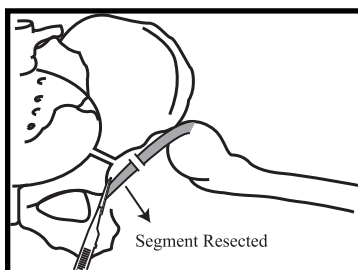
to publish and lecture both nationally and internationally on hip disorders.

Dr. Dennis Wenger has had a career long intensive interest in childhood hip disorders. He had his orthopedic residency training program and produced several research papers with the renowned Dr. Ignacio Ponseti, Director of Children's Orthopedics at the University of Iowa. Dr. Ponseti was instrumental in developing an understanding of the ossification centers and development of both the normal childhood hip, as well as a child with hip dysplasia. Dr. Wenger was involved in his research studies which focused on the natural history for improvement in children who had dislocated hips treated by closed and open reduction methods.

This residency experience was followed by a fellowship in Toronto with training from Dr. Robert Salter and others regarding all types of childhood hip disorders including many complex conditions in childhood. He then assumed a staff position at the Texas Scottish Rite Hospital where he gained extensive experience in the primary treatment of older children with completely dislocated hips, as well as an important experience in managing a child's hip that has been treated surgically and then has re-dislocated.

He also has had an extensive interest in complex hip disorders, including 3D imaging of the hip, as well as the diagnosis and treatment of obscure conditions such as protrusio acetabuli.

Dr. Wenger continues to lecture regularly throughout North America and the world on hip disorders in childhood and for many years has been

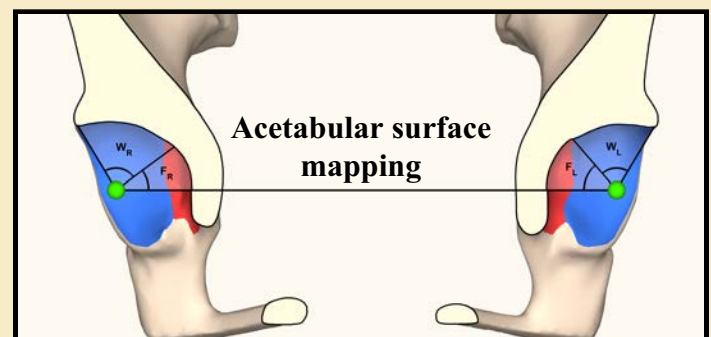


Ludloff – Transferring Lig. Teres

involved in giving instructional course lectures at the American Academy of Orthopedic Surgeons on childhood hip conditions.

Further staff interest in hip disorders includes Dr. Doug Wallace, Dr. Maya Pring and Dr. Salil Upasani, each whom has a strong interest in hip disorders. Dr. Upasani has been brought on staff to strengthen and develop our adolescent hip program as well as our hip research program. His orthopedic residency was here at Rady Children's Hospital San Diego and the University of California San Diego where he developed a strong interest in hip conditions. He then went to Boston Children's Hospital for his fellowship where intensive training by both Dr. Michael Millis and Dr. Young-Jo Kim have given him a world class exposure to the burgeoning specialty of hip preservation surgery. His major clinical and research focus is on late adolescents, teenagers and young adults who have a variety of hip conditions ranging from hip impingement to the residuals of Perthes disease, slipped capital femoral epiphysis and other disorders.

Our research efforts in hip disorders in childhood include membership in the widely known International Hip Dysplasia Institute centered in Orlando, Florida and directed by Dr. Chad Price with funding from the well-known Hollywood star "Larry the Cable Guy". Dr. Mubarak, Dr. Upasani and Mr. J.D. Bomar, MPH, our orthopedic hip research coordinator, are instrumental in helping this study group



process their research data leading to publications.

Our research and publication experience for childhood hip conditions has been remarkable with the illustrations noted on this page symbolizing a few of our many contributions.

Much remains to be learned about hip disorders in childhood, and our combination of clinical and basic research efforts related to the hip are among the best recognized in the world. We look forward to continued growth in our knowledge and experience related to the childhood hip.



*41st Annual
David H. Sutherland Visiting
Professorship
April 28, 2014*

Peter M. Waters, M.D.

**Orthopedic Surgeon-in-Chief, Orthopedic Center – Boston Children’s Hospital
Director, Brachial Plexus Program; Director, Hand & Orthopedic Upper Extremity Program
John E. Hall Professor of Orthopedic Surgery, Harvard**

The 41st Annual David Sutherland Pediatric Orthopedic Visiting Professorship was held under a special format this year because of the Pediatric Orthopedic Society of North America (POSNA) meeting which would be held in Los Angeles. Accordingly, we elected for a Monday format just prior to the POSNA meeting to allow more of our alumni to attend. This proved to be a great success.

The Monday, April 28, 2014, Visiting Professor program featured Peter M. Waters, M.D., Orthopedic Surgeon-In-Chief at Boston Children’s Hospital and the John E. Hall Professor of Orthopedic Surgery at Harvard University. He is also the Director of the Hand and Upper Extremity Program at Boston Children’s Hospital.

The program started with a social day which included a round of golf with our esteemed visiting professor. On Sunday evening, we had a faculty dinner with our faculty and fellows in attendance along with Dr. Waters and his wife, Janet. This was kindly hosted at the home of Dr. Doug Wallace, Chief of Hand Surgery here at Rady Children’s Hospital. This was a pleasant social experience as the accompanying photographs note.

The Monday Visiting Professorship was an all-day affair with multiple lectures delivered by Dr. Waters along with many original research papers, presented by our staff, fellows and research team. In addition, important and complex cases were presented for discussion. The program closed with a common case

presentation session where Dr. Waters and Dr. Wenger held an instructive, Socratic dialogue regarding how simple problems in children’s orthopedics are managed at Boston Children’s Hospital as compared to Rady Children’s Hospital in San Diego.

Overall, this was a productive format, and we were particularly happy to have ten prior fellows attend the Visiting Professorship as well as the social event at the home of Dr. Wallace.



Welcome dinner – Home of Dr. Doug Wallace.

41st Annual David H. Sutherland Visiting Professorship - 2014



Dr. Yazsay, Dr. Abby Allen and child (NYC), Dr. Meghan Imrie (Stanford)(both prior fellows), Mr. Allen and Dr. Wallace (host).



Stu Smay (host), Visiting Professor, Dr. Peter Waters, and Dr. Wenger.



Dr. Edmonds and Dr. Wallace (host).



Dr. Adamczyk (Akron), Dr. Capelo (Ft. Worth), Dr. Newton and Mrs. Adamczyk.



Dr. Newton with Dr. and Mrs. Andre Kaelin (Switzerland).

*41st Annual David H. Sutherland
Visiting Professorship - 2014
(continued from page 19)*



Dr. Upasani and current fellows, Lissette Salgueiro and Jon Peterson.



Prior co-fellows meet again, Dr. Peter Waters, Dr. Andrew Pennock and Dr. Reid Abrams. Dr. Waters (Boston) and Dr. Abrams (UCSD hand surgeon) served together as fellows in the MGH/Boston Children's Hospital Program in the mid-1980s.



Dan Gallivan, Dr. Maya Pring, JD Bomar (Research Coordinator), and Karen Noble (Orthopedic Program Coordinator).



(Above) Dr. Lee Phillips (current fellow) and his fiancé, Kendall Robinson, at the Visiting Professor Dinner. Their charmed life began in Utah, continued in San Diego, will further continue in Texas, and then lead to active practice in St. Petersburg, Florida. We wish them the best.



(Left) The Adameczyks (Akron), Shyam Kishan (Indianapolis), the Van Valins (Milwaukee).

Special Team Members

Christine L. Farnsworth, MS
Translational Research Manager



We are continuing our tradition of recognizing exemplary employees. This year we would like to recognize Christy Farnsworth. Christy has been a valuable member of the orthopedic department for 22 years. She earned a Bachelors degree (Premedical) and a Masters Degree in Bioengineering from the University of California, San Diego and has completed an internship in Animal Mechanics at the University of Leeds, UK as well as a Fellowship in Muscle Physiology at UCSD.

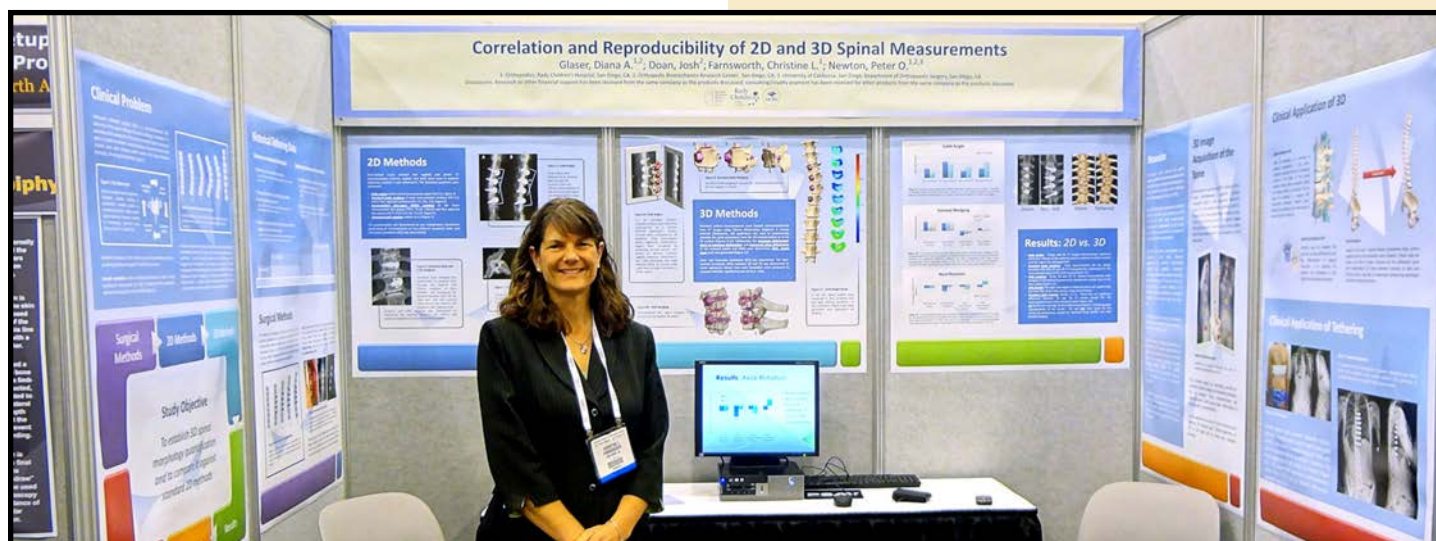
She was introduced to the practice of pediatric orthopedics by Dr. Mubarak, Dr. Wenger and Dr. Chambers who patiently educated her in taking patient history, performing initial clinical exams, hanging x-rays, teaching patients and families about common orthopedic conditions (toing-in, etc.), applying a Pavlik harness and making Cobb and Acetabular index measurements. During the next several interesting and high-energy years of clinical work and exposure, she took part in a few trauma research studies. As the photographer and primary AV support (JD's predecessor), she also earned a radiology technician license.

A few years after she started, Peter Newton joined the practice and committed our program to making research a priority. In 1998 Christy became the first person in the department to be solely dedicated to supporting the research interests of the practice. Christy has been instrumental in growing the research division to an internationally recognized team of eleven full-time research assistants, coordinators and bioengineers supporting ten staff, four fellows, and numerous residents, medical students and international fellows.

Christy works with the orthopedic staff, fellows and residents to answer important clinical questions using various research tools (biomechanics, histology, 3D imaging and analysis, biochemistry, genetic analysis, etc.). Her role has expanded over the years to include grant writing, budget preparation, coordinating in vivo and translational research studies, overall project and timeline coordination, communication between the investigators, IACUC study approval, IRB study approval, data analysis, report and abstract writing, presentation to sponsors and at national/international meetings, manuscript preparation and tutorial coordination.

Christy is especially proud of having had the opportunity to work alongside fourteen orthopedic residents during their research year (or years), training them in animal surgical procedures, anesthesia, post-operative care and health monitoring, then seeing their careers take them all over the country in various orthopedic surgical positions. One of these residents has "returned home" and is now a staff physician with Rady Children's Orthopedics (Dr. Upasani).

Currently, Christy is an author on 29 publications; over 125 accepted abstracts and is an active member of the Scoliosis Research Society and the Orthopaedic Research Society. Christy is very grateful to Rady Children's orthopedics department for providing unique and broad exposure to the basic science and clinical practice of orthopedics and is happy to be an integral part of this team effort to pursue the best treatment for orthopedic conditions in children.



AOOS 2012, San Francisco.



Notes From a Former Fellow

Firoz Miyanji, MD, FRCSC – BC Children’s Hospital – Vancouver
(Fellow – 2005-2006)



Dr. Miyanji and patient.

How a fellowship can completely transform where you were going, how you were getting there, and with what means...

I still recall receiving the correspondence from Dr. Wenger: we had matched to San Diego for a Pediatric Orthopedic Fellowship! “Sometimes being lucky rather than good can make all the difference,” I remember telling my wife.

I have to confess that I met the acceptance letter with trepidation; after all we were going to “America” to spend a year with icons of Orthopedics. But when we arrived, we were immediately embraced as family. The warmth and humility of the staff, the commitment to education and knowledge exchange, and the pride of being part of the San Diego family remains at the forefront of our memories of San Diego.

The fellowship truly focused not simply on the science, but rather the art of pediatric orthopedics. The abundance of cases and crisply structured program allowed me to absorb pediatric orthopedics and made me feel like a medical student all over again: I felt

excited and keen and honestly, happy! Dennis Wenger’s philosophical prowess would help smooth out edges in any trainee. Scott Mubarak had an indefatigable positive energy that kept you 'on your toes' but always in a way that would harness your strengths. The orchestral OR performances of Peter Newton and Doug Wallace would simply keep you in awe. And then there was the grace of Hank Chambers. The year undoubtedly shaped me as a physician and surgeon; as a mentor and colleague; and made me realize the significance of an academic career.

Although I had a year of a spine fellowship prior to my commencing in San Diego, the principles of deformity I quickly came to respect lived deep down with the “pedi-pods”. The year in San Diego did not simply complement my adult spine fellowship but made me recognize, interpret, and execute in such a systematic way that everything I do somehow relates to my training in San Diego. Having joined BC Children’s Hospital in Vancouver, my practice is majority spine, however, I am still asked by my partners on non-spine cases, “What would they do in San Diego?” I have been able to demonstrate the “San Diego acetabuloplasty”, “the ligamentum teres transfer”, as well as the “3-C osteotomy”.



Dr. Miyanji and his children.



Dr. Miyanji and family.



Dr. Miyanji and his new hobby, sailing.

I was lucky to return to an academic setting in Vancouver with almost 80-90% of my practice focusing on pediatric spine. However, having returned to Canada I quickly learned of some of the unique challenges of a publicly funded system. Challenges to timely access to care with significant wait times for surgery were the norm. Maneuvering through such a milieu to advocate for patients at both a Health Authority and Ministry level I felt I was only able to do successfully because of San Diego. Dr. Wenger's mantra of OR efficiency, coupled with Dr. Mubarak's aim for perfection, to which you add the Newtonian eloquence of data acquisition and presentation and your resource allocation just improved over 50%.

I think for me, more than anything, the "pearls" that I gained during my time in San Diego; those items not found in the written word (you cannot simply "Google" it); ideas, thoughts, intangibles emphasizing the art of surgical practice has made me feel like I landed the best fellowship in the world. I truly enjoy my practice, my patients, and every time I scrub and am not sure where I am, I can hear Dr. Wenger's gracefully paced words with the perfect intonations, "It is ok to be lost when you start the case; once you are lost, you will start finding where you need to go and quickly know how you will be getting there..."; I then smile because I now know where I am going, how I am getting there, and with what means.

Firoz Miyanji - Vancouver



Dr. Miyanji's Fellowship Class of 2006 – Visiting Professor Lawrence Rinsky (Stanford), Avi Batner, Dennis Wenger, Preana Patel, Firoz Miyanji, and Scott Mubarak.

Orthopedic NP/PA Team

We continue to have an outstanding Nurse Practitioner/Physician Assistant team dedicated to expanding the care capacity in one of the world's largest volume centers for the care of children's orthopedic problems. Our busy group of 11 team members is featured in the photograph below.

We have been able to recruit and retain high quality individuals who make our orthopedic clinical productivity outstanding. We have an intensive training pro-

gram for fellows, residents, and medical students, and have been able to apply that educational system to our NP/PA team. This allows them to quickly become expert in every area of children's orthopedics, resulting in a critical addition to our program strength and national prominence. Also each year, team members attend the POSNA and POPS (Pediatric Orthopedic Practitioner Society) national conferences to keep their skills at a "state of the art" level.

Our NP/PA Team



SLAOTI

(Sociedad Latino Americana de Ortopedia y Traumatología Infantil)

This year Dr. Edmonds and the orthopedic staff at RCHSD played host to the 2014 SLAOTI (South American equivalent to POSNA) Traveling fellows. Drs. Viviana Teske (Uruguay), Matias Sepulveda (Chile), and Carolina Halliburton (Argentina) started their USA visit in Dallas at TSRH and then flew to San Diego late at night on April 23.

The first day in beautiful Southern California was a sight-seeing adventure. They visited the world famous San Diego zoo and Botanical garden followed by lunch at the Prado in Balboa park. We then toured the park prior to heading further south to Coronado and the Silver Strand State Beach. Here they had a fantastic view of downtown San Diego with the mountains behind, the bay in front and the opportunity to collect sand dollars on the beach.

After a quick respite at the hotel they joined our faculty at the Edmonds household for dinner and socializing. Many stories were shared and, likely, many stories went misunderstood. After a well-deserved nights rest, they were roused at an early hour to attend our regularly scheduled “Bone Board” conference at 0630 hrs. After being treated to a menagerie of fractures and surgical post-operative films, they proceeded to reciprocate the learning experience by providing short talks on a topic of their interest.

Dr Teske discussed “Aneurysmal bone cysts treated by curettage and bone grafting,” much to the delight of Drs Pring and Mubarak. Dr Sepulveda enraptured us with the “Management with external fixator of supracondylar humerus fractures in children.” And so our spine colleagues would not be disheartened, Dr Halliburton gave an eloquent discussion entitled “Langerhans Cell Histiocytosis in the Pediatric spine.” With their end of the deal complete, they were then treated to a tour of our new facilities, including: the football field length new OR suites, the MAL, our new Orthopedic Center and the 360 Sports Medicine facility.

Prior to lunch they joined Drs Mubarak and Wenger in clinic for real time clinical education; and then enjoyed a delightful lunch with our attendings, fellows and the midlevel provider staff. After lunch they joined Drs Pring and Edmonds in clinic to get a slightly different perspective on Pediatric Orthopedics. That night, the fellows joined Drs Edmonds, Yazsay and Upasani for dinner at the Stone Brewing Co. Bistro for excellent food and the now San Diego staple of IPA’s.

Their whirlwind tour of San Diego wrapped up with an early flight out to Los Angeles and the 2014 POSNA annual meeting in Hollywood.



Dr. Mubarak, Dr. Teske (Uruguay), Dr. Sepulveda (Chile), Dr. Wenger, and Dr. Halliburton (Argentina).



Dr. Edmonds and Dr. Salgueiro (current fellow) take the SLAOTI Traveling Fellows and their families to the San Diego zoo.

Pediatric Orthopedic Society of North America (POSNA) Meeting, Hollywood - April 30 - May 3, 2014

We were very happy to have the POSNA meeting on the West Coast as most San Diegans spend much more time than they would like on planes traveling throughout North America and our location on the corner of the continent makes our flights longer!

POSNA proved to be an outstanding meeting in Los Angeles (Hollywood) and with a little bit of schedule shuffling, nine of our ten staff were able to attend the meeting. In addition, several nurse practitioners and most of our fellows attended.

Multiple original research papers were presented at the POSNA meeting by the orthopedic staff, fellows and research team of Rady Children's Hospital San Diego. Getting a paper on such a competitive program is a great honor for an institution, and we want to thank our wonderful research team, administered by Tracey Bastrom, for organizing our efforts. Congratulations!

As has become a standard for us, we again held our annual fellow alumni event at the time of the POSNA meeting. This was held on Thursday night, 1 May 2014, at the Sadie's Kitchen restaurant in Hollywood, which was near the meeting hotel. We had a great attendance, and everyone enjoyed getting back in touch with their colleagues as well as learning all the news from San Diego. In addition, we enjoyed learning about our prior fellows and their current activities in their academic positions and practices. The attached photographs demonstrate this happy alumni event.



Dr. Wenger with prior fellows (left to right) Rob de Swart (Cleveland), Michael Elliott (Fresno) and Walid Yassir (Detroit).



Happy returning and current fellows (left to right) Meagan Imrie (Stanford), Matt Hollenbeck (current fellow), Lee Phillips (current fellow), Alison Rozansky (Los Angeles), Humberto Guzman (Puerto Rico), Lissette Salgueiro (current fellow), John Kemppainen (Grand Rapids).

*RGHS/UCSD Pediatric Orthopedic Fellowship
Alumni Reunion - May 2014 - Hollywood*
(continued on page 28)



Shyam Kishan (Indianapolis), Prerana Patel (Albany) and Tim Oswald (Atlanta).



Dr. Edmonds (staff), Vineeta Swaroop (Chicago) and Pat Henderson (Tucson).



Research leaders - Tracey Bastrom (San Diego) and Michelle Marks (Tucson).



Peter Newton, Division Chief, and Eric Fornari (New York City).



Scott Nelson (Loma Linda), Dr. Wenger, Corey Fuller (future fellow) and George Gantsoudes (Indianapolis).



Shyam Kishan (Indianapolis), Scott Van Valin (Milwaukee), Arji Mahadev (Singapore) and Mark Adamczyk (Akron).

RGHS/UCSD Pediatric Orthopedic Fellowship Alumni Reunion - May 2014 - Hollywood



1999-2000 Fellowship Team – Afshin Aminian (Orange County), Michelle Marks (Research Coordinator - now Tucson), David Scher (New York City), Ernie Sink (New York City).



Kathy Wenger (San Diego), Kevin Shea (Boise), Dr. Wenger, JD Bomar (San Diego).



Stefan Parent (Montreal), Michelle Marks (Tucson).



Another fellow alumni team - (2008-2009) Meagan Imrie (Stanford), Humberto Guzman (Puerto Rico), Abby Lynn Allen (New York City).



LA folks, Ali Rozansky, the Valley Girl, San Fernando Valley, and Bob Cho, Los Angeles (alumni event organizer and restaurant selector).



Prior UCSD resident Dr. Suzanne Steinman, now hand surgeon – Seattle, Dr. Chambers, Dr. Klane White (prior UCSD resident, now Seattle Children’s Hospital).

RCHSD/UCSD Pediatric Orthopedic Fellowship Alumni Reunion - May 2014 - Hollywood



Power group - Kevin Shea (Boise), Dr. Edmonds, Dr. Corey Fuller (future fellow), Scott Nelson (Loma Linda), Jordy Gantsoudes (Indianapolis), Bob Cho (Los Angeles).



Dr. Suzanne Steinman (former resident UCSD), Dr. Mubarak, Klane White (former resident, now Seattle Children's Hospital).



Molly Moor (former research assistant, San Diego, now Florida), Dr. Eisner (Florida), Dr. Gordy Gantsoudes (Indianapolis).



Recent fellow team – Dr. Brian Scannell (Charlotte), Dr. John Kemppainen (Grand Rapids), Dr. Chris Souder (Temple, TX).



Current fellows - Lee Phillips, Lissette Salgueiro, Matt Hollenbeck (Dr. Jon Peterson was back in San Diego covering the service!).

Documentation

(Our Publications)

The most savage controversies are those about matters as to which there is no good evidence either way .

– Bertrand Russell



Orthopedic fellows and staff enjoying the discussion during the dynamic Rady Children's Hospital Friday morning orthopedic x-ray review conference.

The Rady Children's Hospital-University of California San Diego orthopedic program continues as one of the world's leading centers for children's orthopedic clinical and biomechanical research. Our work is published in the most important orthopedic journals and is widely quoted. The publications listed below were produced by our department between July, 2012 and December 2013.

Moraleda L, Salcedo M, Bastrom TP, Wenger DR, Albiñana J, Mubarak SJ: Comparison of the calcaneo-cuboid-cuneiform osteotomies and the calcaneal lengthening osteotomy in the surgical treatment of symptomatic flexible flatfoot. *J Pediatr Orthop.* 2012 Dec;32(8):821-9.

Choo AD, Mubarak SJ: Longitudinal epiphyseal bracket. *J Child Orthop.* 2013 Dec;7(6):449-454.

Russo F, Moor MA, Mubarak SJ, Pennock AT: Salter-Harris II fractures of the distal tibia: does surgical management reduce the risk of premature physal closure? *J Pediatr Orthop.* 2013 Jul-Aug;33(5):524-9.

Pandya NK, Edmonds EW, Roocroft JH, Mubarak SJ: Tibial tubercle fractures: complications, classification, and the need for intra-articular assessment. *J Pediatr Orthop.* 2012 Dec;32(8):749-59.

Dutton P, Edmonds EW, Lark RK, Mubarak SJ: Prevalence of painful peroneal tubercles in the pediatric population. *J Foot Ankle Surg.* 2012 Sep-Oct;51(5):599-603.

Wenger DR: Limitations of evidence-based medicine: the role of experience and expert opinion. *J Pediatr Orthop.* 2012 Sep;32 Suppl 2:S187-92.

Sponseller PD, Jain A, Shah SA, Samdani A, Yaszay B, Newton PO, Thaxton LM, Bastrom TP, Marks MC: Deep wound infections after spinal fusion in children with cerebral palsy: a

prospective cohort study. *Spine (Phila Pa 1976).* 2013 Nov 1;38(23):2023-7.

Demura S, Bastrom TP, Schlechter J, Yaszay B, Newton PO, Harms Study Group: Should postoperative pulmonary function be a criterion that affects upper instrumented vertebra selection in adolescent idiopathic scoliosis surgery? *Spine (Phila Pa 1976).* 2013 Oct 15;38(22):1920-6.

Bastrom TP, Marks MC, Yaszay B, Newton PO, Harms Study Group: Prevalence of postoperative pain in adolescent idiopathic scoliosis and the association with preoperative pain. *Spine (Phila Pa 1976).* 2013 Oct 1;38(21):1848-52.

Bittersohl B, Hosalkar HS, Wenger DR: Surgical treatment of hip dysplasia in children and adolescents. *Orthop Clin North Am.* 2012 Jul;43(3):301-15.

Samdani AF, Belin EJ, Bennett JT, Pahys JM, Marks MC, Miyajni F, Shufflebarger HL, Lonner BS, Newton PO, Betz RR, Cahill PJ: Unplanned return to the operating room in patients with adolescent idiopathic scoliosis: are we doing better with pedicle screws? *Spine (Phila Pa 1976).* 2013 Oct 1;38(21):1842-7.

Wenger DR: Is there a role for acetabular dysplasia correction in an asymptomatic patient? *J Pediatr Orthop.* 2013 Jul-Aug;33Suppl 1:S8-12.

Carreau JH, Farnsworth CL, Glaser DA, Doan JD, Bastrom T,

Bryan N, Newton PO: The modulation of spinal growth with nitinol intervertebral stapling in an established swine model. *J Child Orthop*. 2012 Jul;6(3):241-53.

Vitale MG, Riedel MD, Glotzbecker MP, Matsumoto H, Roye DP, Akbarnia BA, Anderson RC, Brockmeyer DL, Emans JB, Erickson M, Flynn JM, Lenke LG, Lewis SJ, Luhmann SJ, McLeod LM, Newton PO, Nyquist AC, Richards BS 3rd, Shah SA, Skaggs DL, Smith JT, Sponseller PD, Sucato DJ, Zeller RD, Saiman L: Building consensus: development of a Best Practice Guideline (BPG) for surgical site infection (SSI) prevention in high-risk pediatric spine surgery. *J Pediatr Orthop*. 2013 Jul-Aug;33(5):471-8.

Hwang SW, Samdani AF, Stanton P, Marks MC, Bastrom T, Newton PO, Betz RR, Cahill PJ: Impact of pedicle screw fixation on loss of deformity correction in patients with adolescent idiopathic scoliosis. *J Pediatr Orthop*. 2013 Jun;33(4):377-82.

McElroy MJ, Sponseller PD, Fuhrhop SK, Russell CJ, Newton PO, Marks MC, Sanders JO, Yazici M, Pawelek JB, Akbarnia BA, Harms Study Group, Growing Spine Study Group: Clinically significant differences exist between curves in operative idiopathic early-onset scoliosis and adolescent idiopathic scoliosis. *Spine (Phila Pa 1976)*. 2013 Jul 15;38(16):1368-74.

Hosalkar HS, Pandya NK, Wenger DR: What's new in pediatric orthopaedics. *J Bone Joint Surg Am*. 2013 Feb 20;95(4):377-83.

Demura S, Yaszay B, Bastrom TP, Carreau J, Newton PO, Harms Study Group: Is decompensation preoperatively a risk in Lenke 1C curves? *Spine (Phila Pa 1976)*. 2013 May 15;38(11):E649-55.

Franko OI, Bray C, Newton PO: Validation of a scoliotometer smartphone app to assess scoliosis. *J Pediatr Orthop*. 2012 Dec;32(8):e72-5.

Ilgenfritz RM, Yaszay B, Bastrom TP, Newton PO; Harms Study Group: Lenke 1C and 5C spinal deformities fused selectively: 5-year outcomes of the uninstrumented compensatory curves. *Spine (Phila Pa 1976)*. 2013 Apr 15;38(8):650-8.

Sanders JO, Newton PO, Browne RH, Herring AJ: Bracing in adolescent idiopathic scoliosis, surrogate outcomes, and the number needed to treat. *J Pediatr Orthop*. 2012 Sep;32 Suppl 2:S153-7.

Ono T, Bastrom TP, Newton PO: Defining 2 components of shoulder imbalance: clavicle tilt and trapezial prominence. *Spine (Phila Pa 1976)*. 2012 Nov 15;37(24):E1511-6.

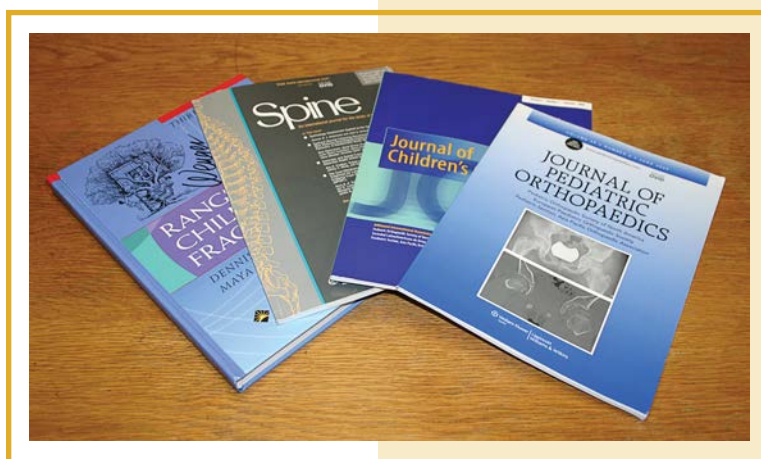
Newton PO, Bastrom TP, Emans JB, Shah SA, Shufflebarger HL, Sponseller PD, Sucato DJ, Lenke LG: Antifibrinolytic agents reduce blood loss during pediatric vertebral column resection procedures. *Spine (Phila Pa 1976)*. 2012 Nov 1;37(23):E1459-63.

Newton PO, Marks MC, Bastrom TP, Betz R, Clements D, Lonner B, Crawford A, Shufflebarger H, O'Brien M, Yaszay B; Harms Study Group: Surgical treatment of Lenke 1 main thoracic idiopathic scoliosis: results of a prospective, multicenter study. *Spine (Phila Pa 1976)*. 2013 Feb 15;38(4):328-38.

Lenke LG, Newton PO, Sucato DJ, Shufflebarger HL, Emans JB, Sponseller PD, Shah SA, Sides BA, Blanke KM: Complications after 147 consecutive vertebral column resections for severe pediatric spinal deformity: a multicenter analysis. *Spine (Phila Pa 1976)*. 2013 Jan 15;38(2):119-32.

Lark RK, Yaszay B, Bastrom TP, Newton PO; Harms Study Group: Adding thoracic fusion levels in Lenke 5 curves: risks and benefits. *Spine (Phila Pa 1976)*. 2013 Jan 15;38(2):195-200.

Liu RW, Yaszay B, Glaser D, Bastrom TP, Newton PO: A method for assessing axial vertebral rotation based on differential rod curvature on the lateral radiograph. *Spine (Phila Pa 1976)*. 2012 Aug 15;37(18):E1120-5.



Gjolaj JP, Sponseller PD, Shah SA, Newton PO, Flynn JM, Neubauer PR, Marks MC, Bastrom TP: Spinal deformity correction in Marfan syndrome versus adolescent idiopathic scoliosis: learning from the differences. *Spine (Phila Pa 1976)*. 2012 Aug 15;37(18):1558-65.

Hosalkar HS, Pandya NK, Bomar JD, Wenger DR: Hip impingement in slipped capital femoral epiphysis: a changing perspective. *J Child Orthop*. 2012 Jul;6(3):161-72.

Cidambi KR, Glaser DA, Bastrom TP, Nunn TN, Ono T, Newton PO: Postoperative changes in spinal rod contour in adolescent idiopathic scoliosis: an in vivo deformation study. *Spine (Phila Pa 1976)*. 2012 Aug 15;37(18):1566-72.

Pennock AT, Bomar JD, Chambers HG: Extra-articular, intraepiphyseal drilling for osteochondritis dissecans of the knee. *Arthrosc Tech*. 2013 Jun 28;2(3):e231-5.

Chambers HG: CORR Insights®: does proximal rectus femoris release influence kinematics in patients with cerebral palsy and stiff knee gait? *Clin Orthop Relat Res*. 2013 Oct;471(10):3301-2.

Chambers HG: Toxins for toe-walking: should they be used? *J Bone Joint Surg Am*. 2013 Mar 6;95(5):e31.

Schulz JF, Chambers HG: Juvenile osteochondritis dissecans of the knee: current concepts in diagnosis and management. Instr Course Lect. 2013;62:455-67.

Smith LR, Chambers HG, Lieber RL: Reduced satellite cell population may lead to contractures in children with cerebral palsy. Dev Med Child Neurol. 2013 Mar;55(3):264-70.

Chambers HG, Shea KG, Anderson AF, Jojo Brunelle TJ, Carey JL, Ganley TJ, Paterno M, Weiss JM, Sanders JO, Watters WC 3rd, Goldberg MJ, Keith MW, Turkelson CM, Wies JL, Raymond L, Boyer KM, Hitchcock K, Sluka P, Boone C, Patel N; American Academy of Orthopaedic Surgeons: American Academy of Orthopaedic Surgeons clinical practice guideline on: the diagnosis and treatment of osteochondritis dissecans. J Bone Joint Surg Am. 2012 Jul 18;94(14):1322-4.

Gargas J, Yaszay B, Kruk P, Bastrom T, Shellington D, Khanna S: An analysis of cervical spine magnetic resonance imaging findings after normal computed tomographic imaging findings in pediatric trauma patients: ten-year experience of a level I pediatric trauma center. J Trauma Acute Care Surg. 2013 Apr;74(4):1102-7.

Cho RH, Yaszay B, Bartley CE, Bastrom TP, Newton PO: Which Lenke IA curves are at the greatest risk for adding-on... and why? Spine (Phila Pa 1976). 2012 Jul 15;37(16):1384-90.

Zell M, Dwek JR, Edmonds EW: Origin of the medial ulnar collateral ligament on the pediatric elbow. J Child Orthop. 2013 Oct;7(4):323-8.

Dashe J, Roocroft JH, Bastrom TP, Edmonds EW: Spectrum of shoulder injuries in skeletally immature patients. Orthop Clin North Am. 2013 Oct;44(4):541-51.

Shieh A, Bastrom T, Roocroft J, Edmonds EW, Pennock AT: Meniscus tear patterns in relation to skeletal immaturity: children versus adolescents. Am J Sports Med. 2013 Dec;41(12):2779-83. Gottschalk HP, Bastrom TP, Edmonds EW: Reliability of internal oblique elbow radiographs for measuring displacement of medial epicondyle humerus fractures: a cadaveric study. J Pediatr Orthop. 2013 Jan;33(1):26-31.

Eisner EA, Roocroft JH, Moor MA, Edmonds EW: Partial rotator cuff tears in adolescents: factors affecting outcomes. J Pediatr Orthop. 2013 Jan;33(1):2-7.

Pandya NK, Edmonds EW: Immediate intramedullary flexible nailing of open pediatric tibial shaft fractures. J Pediatr Orthop. 2012 Dec;32(8):770-6.

Fornari ED, Suszter M, Roocroft J, Bastrom T, Edmonds EW, Schlechter J: Childhood obesity as a risk factor for lateral condyle fractures over supracondylar humerus fractures. Clin Orthop

Relat Res. 2013 Apr;471(4):1193-8.

Gottschalk HP, Sagoo D, Glaser D, Doan J, Edmonds EW, Schlechter J: Biomechanical analysis of pin placement for pediatric supracondylar humerus fractures: does starting point, pin size, and number matter? J Pediatr Orthop. 2012 Jul-Aug;32(5):445-51.

Schmitz MR, Bittersohl B, Zaps D, Bomar JD, Pennock AT, Hosalkar HS: Spectrum of radiographic femoroacetabular impingement morphology in adolescents and young adults: an EOS-based double-cohort study. J Bone Joint Surg Am. 2013 Jul 3;95(13):e90.

Schulz J, Moor M, Roocroft J, Bastrom TP, Pennock AT: Functional and radiographic outcomes of nonoperative treatment of displaced adolescent clavicle fractures. J Bone Joint Surg Am. 2013 Jul 3;95(13):1159-65.

*If a little knowledge is dangerous,
where is the man who has so
much as to be out of danger?*

– Thomas Henry Huxley

Monazzam S, Bomar JD, Dwek JR, Hosalkar HS, Pennock AT: Development and prevalence of femoroacetabular impingement-associated morphology in a paediatric and adolescent population: a CT study of 225 patients. Bone Joint J. 2013 May;95-B(5):598-604.

Millett PJ, Horan MP, Pennock AT, Rios D: Comprehensive Arthroscopic Management (CAM) procedure: clinical results of a joint-preserving arthroscopic treatment for young, active patients with advanced shoulder osteoarthritis. Arthroscopy. 2013 Mar;29(3):440-8.

Hosalkar HS, Pennock AT, Zaps D, Schmitz MR, Bomar JD, Bittersohl B: The hip antero-superior labral tear with avulsion of rectus femoris (HALTAR) lesion: does the SLAP equivalent in the hip exist? Hip Int. 2012 Jul-Aug;22(4):391-6.

Ejnisman L, Philippon MJ, Lertwanich P, Pennock AT, Herzog MM, Briggs KK, Ho CP: Relationship between femoral anteversion and findings in hips with femoroacetabular impingement. Orthopedics. 2013 Mar;36(3):e293-300.

Upasani VV, Bomar JD, Parikh G, Hosalkar H: Reliability of plain radiographic parameters for developmental dysplasia of the hip in children. J Child Orthop. 2012 Jul;6(3):173-6.

Register B, Pennock AT, Ho CP, Strickland CD, Lawand A, Philippon MJ: Prevalence of abnormal hip findings in asymptomatic participants: a prospective, blinded study. Am J Sports Med. 2012 Dec;40(12):2720-4.

Hwang SW, Samdani AF, Marks M, Bastrom T, Garg H, Lonner B, Bennett JT, Pahys J, Shah S, Miyanji F, Shufflebarger H, Newton P, Betz R: Five-year clinical and radiographic outcomes using pedicle screw only constructs in the treatment of adolescent idiopathic scoliosis. Eur Spine J. 2013 Jun;22(6):1292-9.

Ellis HB, Matheny LM, Briggs KK, Pennock AT, Steadman JR: Outcomes and revision rate after bone-patellar tendon-bone allograft versus autograft anterior cruciate ligament reconstruction in patients aged 18 years or younger with closed physes. *Arthroscopy*. 2012 Dec;28(12):1819-25.

Pandya NK, Upasani VV, Kulkarni VA: The pediatric polytrauma patient: current concepts. *J Am Acad Orthop Surg*. 2013 Mar;21(3):170-9.

Trobisch PD, Samdani AF, Betz RR, Bastrom T, Pahys JM, Cahill PJ. Analysis of risk factors for loss of lumbar lordosis in patients who had surgical treatment with segmental instrumentation for adolescent idiopathic scoliosis. *Eur Spine J*. 2013 Jun;22(6):1312-6.

Hwang SW, Samdani AF, Lonner BS, Marks MC, Bastrom TP, Betz RR, Cahill PJ. A multicenter analysis of factors associated with change in height after adolescent idiopathic scoliosis deformity surgery in 447 patients. *J Neurosurg Spine*. 2013 Mar;18(3):298-302



Dr. Hollenbeck between patients in our new clinic.



Current fellows at Old Coach Vineyards.



Dr. Scott Shoemaker (San Diego), Dr. Newton, Sandy Mubarak and Dr. Mubarak enjoying a SDSU basketball game.



David Pyatt (Director of Operations – Orthopedics) and Dr. Wenger at the entrance to our new clinic.

Spreading the Word – Global Outreach

The Rady Children's Hospital – UCSD children's orthopedic faculty continue to be involved in education and research efforts throughout North America and the world.

The Rady Children's Hospital orthopedic education and training program is now known throughout the world. This leads to many travel responsibilities where our faculty are involved in lecture programs, teaching seminars, demonstrating surgical techniques, etc. throughout North America and the world. This is a special privilege and responsibility, and each year we are seeing both our most senior faculty and also many of our middle level faculty traveling to help get the latest information on children's orthopedic disorders to other centers.

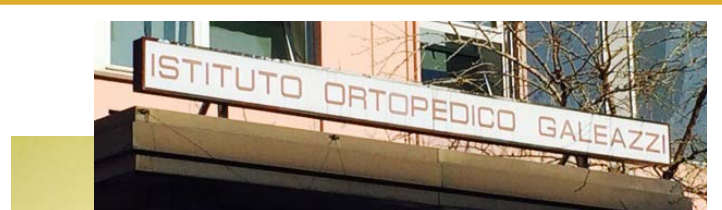
Our faculty continue to travel throughout North America and the world, providing outreach from our orthopedic program, and more importantly, gaining new ideas which can be brought back to San Diego to keep us functioning at a state of the art level. This past year our visiting professorships and invited lectures included almost every major city of North America. Our more senior faculty were involved in many international teaching activities throughout the world including Canada, Belgium, Brazil, England, France, India, Italy, Korea, and elsewhere.

An invitation to lecture at a national or international symposium, means spending several months consolidating research experience and results, developing audio visual material, sometimes making training videos, and synthesizing one's thinking in their particular area of children's orthopedic specialization. Such preparation, helps one to focus their own thinking and systematic way of looking at their area of clinical and research expertise. A major benefit includes that this clarity of thought is brought back to our residents and fellows and applied in our teaching conferences, research program, and in the operating room.

Attached are some of the photographs from the experiences of our faculty members throughout the 2013-2014 academic year.



Dr. Skaggs (LA), Dr. Peter and Cathy Newton – IPOTT – Vancouver



Dr. Chambers with the Sports Medicine and Research Staff at Galeazzi Hospital in Milan.



Dr. Newton and POSNA Planning Committee – EPOS meeting – Bruges, Belgium



Robert Fitch, Rob Lark, Geordy Gantsoudes, Dennis Wenger, Bob Cho, Ernie Sink – PARS meeting – Palm Springs (all were prior fellows with Dr. Wenger).



Dr. Wenger and Dr. Andres Roposch (prior international fellow) Great Ormond St. Children's Hospital and Univ. College, London.



Pediatric Orthopedic Society of India meeting – Dr. VVJ Somaraju (Secretary of POSI)(left) and Dr. Benjamin Joseph (President of POSI)(center) presenting Dr. Wenger with a plaque for giving the 2014 Presidential Oration.



Dr. Wenger and Dr. Vineeta Swarop (prior fellow) with her family – AAOS meeting, Chicago.



Dr. Hefti (Basel), Dr. Wenger, Dr. Wurth (Stuttgart) – IPOTT, Vancouver.



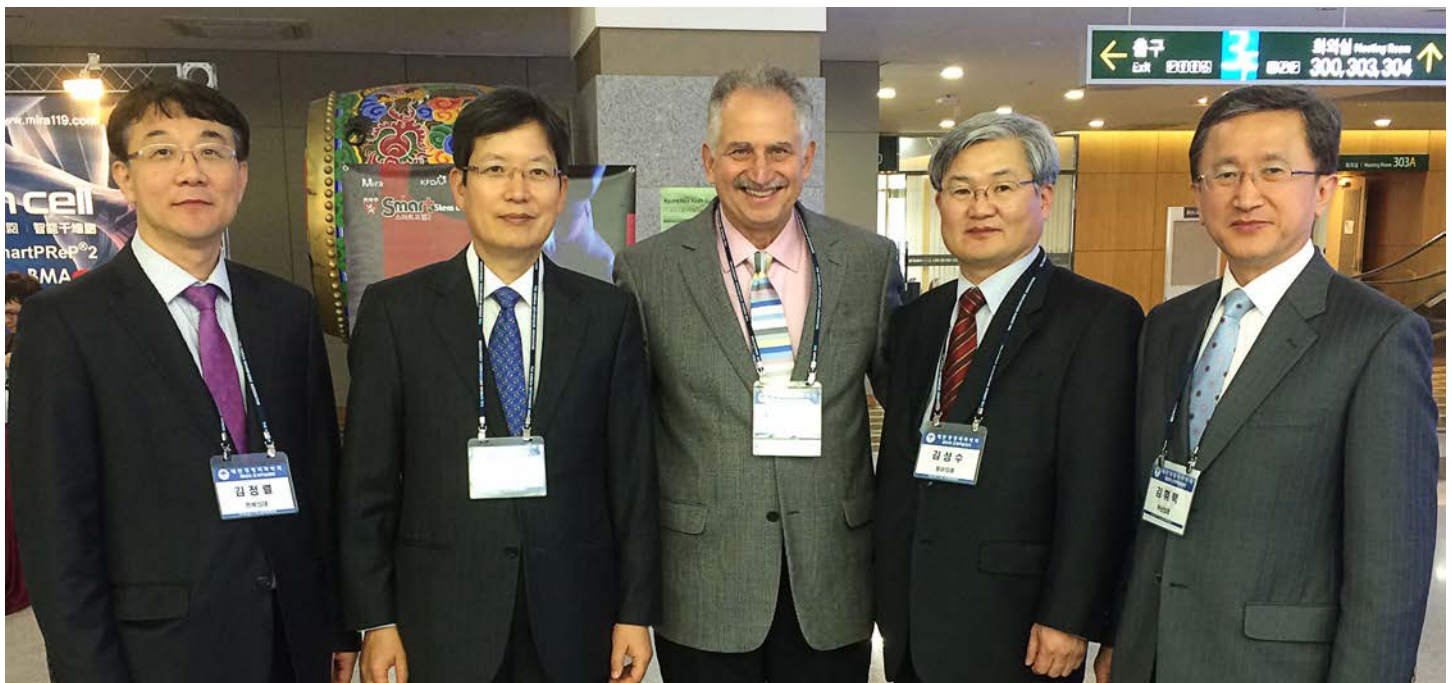
TROIA meeting. Akel Junion (left), Dr. Edmonds, and Alex Lourenco (right). Dr. Edmonds was an invited speaker and was given an honorary membership to A Sociedade Brasileira de Ortopedia Pediátrica.



Dr. Se-II Suk (Seoul) and Dr. Mubarak – Korean Orthopedic Association meeting.



Dr. J. Schulz, Dr. Wenger, and Dr. E. Fornari (prior fellows) Montereiro Children's Hospital, Albert Einstein Medical Center, New York City.



Dr. Jung Ryul Kim, Dr. Jong Sup Shim, Dr. Mubarak, Dr. Sung Soo Kim, and Dr. Hui Taek Kim (prior international fellows) – Korean Orthopedic Association meeting. Jeju Island, Korea, April 2014.