

The Dorothy & Bryant Edwards Fellowship in **Pediatric Orthopedics and Scoliosis**



Versatility in Training

Creating a Strong Foundation for You and Your Patients

TEXAS SCOTTISH RITE HOSPITAL FOR CHILDREN

2015-16 Fellows



Connor Green, F.R.C.S.I. • Elizabeth Hubbard, M.D. • Shawn Funk, M.D. • Rachel Thompson, M.D. • Philip McClure, M.D.

Texas Scottish Rite Hospital for Children (TSRHC) has been training physicians in multiple disciplines of pediatric orthopedics since launching its fellowship program in 1978. Since then, more than 175 fellows have been through the rigorous program, many going on to become leaders at medical institutions around the country and across the world.



The fellowship is part of TSRHC's history of excellence that includes expert, compassionate care and leading edge research, making the hospital the perfect place for orthopedic fellows to receive their advanced training.

U.S. News & World Report has repeatedly recognized TSRHC's achievements, consistently ranking the hospital, in conjunction with Children's Health, among the leading pediatric orthopedic facilities in the U.S., including the No. 1 ranking in 2013-14.

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*2016 Fellow Dr. Shawn Funk with
Chief of Staff Dr. Daniel J. Sucato*

Texas Scottish Rite Hospital for Children

TSRHC opened its doors to the children of Texas in 1921 after a group of Texas Masons approached Dallas' first orthopedic surgeon, Dr. W. B. Carrell, about caring for children with polio. In the 95 years since that auspicious beginning, the hospital has treated more than 250,000 patients and has emerged as a world leader in pediatric orthopedic research, treatment and education.

The hospital primarily cared for children with polio until the 1950s when the Salk and Sabin vaccines virtually eradicated the disease in the Western Hemisphere. This allowed the medical staff at TSRHC to expand treatment for a wide range of orthopedic conditions.



Now led by the hospital's fourth chief of staff, Dr. Daniel J. Sucato, and President/CEO Robert L. "Bob" Walker, TSRHC treats a variety of pediatric orthopedic disorders, including scoliosis, clubfoot, congenital dislocated hip, Legg-Perthes, limb-length and hand differences, sports injuries and certain related neurological disorders and learning disorders, such as dyslexia. Patients receive treatment regardless of their family's ability to pay.

The hospital also has been a leader in the study and treatment of learning disorders. The Luke Waites Center for Dyslexia and Learning Disorders is named for Dr. Luke Waites, who in 1965 established a program at TSRHC to identify and treat children with dyslexia. The World Federation of Neurology met at TSRHC in 1968 and formulated the first consensus definition of developmental dyslexia.

That philosophy of patient-centered care extends beyond treatment, to research and education. In TSRHC's six Centers for Excellence, researchers are discovering the answers to childhood orthopedic conditions while programs such as the Fellowship in Pediatric Orthopedics and Scoliosis prepares physicians to successfully deal with the most challenging cases they will face during their careers.



From top: TSRHC patients Isaac, age 1, of Fort Worth; Carissa, age 10, of Garland; and Micah, age 11, of Shady Shores

A Message from Dr. Daniel J. Sucato, Chief of Staff



Welcome to the fellowship application process – enjoy the journey. It is a special time you have earned through hard work and dedication, so take it all in and relish the opportunity.

As you know, pediatric orthopedic surgery is unlike any other subspecialty of orthopedics in that you have the opportunity to treat the entire patient – from the spine, to the hip, to the knee, to the foot. Similar to the evolution of pediatric orthopedics, we continue to move forward to change in how we structure the fellowship, the volume of patients seen and the increasing operative experience and independence during the year.

Training is a challenging undertaking and requires an extremely busy program to cover all areas of pediatric orthopedics. The program must provide a teaching environment for the fellow with significant staff interaction while offering the opportunity to perform surgical procedures which continue to also evolve and increase in complexity. The combined experience of training at Texas Scottish Rite Hospital for Children and Children’s Health provides an opportunity to work with 19 pediatric orthopedic surgeons who love taking care of children, do the best for patients and always look for better ways to manage pediatric orthopedic conditions through quality research. The fellowship program here at TSRHC provides you with all you need and more.

At TSRHC, our three core activities are patient care, research and education. These are interwoven as we put the patient at the center of our efforts. It is a clear vision that allows us to take great care of patients, to research questions for improved patient care and to educate you and ourselves. The latter is best exemplified by our Monday night preoperative conference – 2 ½ hours of learning from each other with all staff, fellows and residents present. This is balanced by the hands-on experience which has been enhanced with a modification of the rotation schedules to allow fellows to have flexibility to spend more time in the operating room and to choose elective rotations at the completion of the fellowship.

In summary, the fellowship program at TSRHC provides you with a great opportunity to learn, expand your skill set and become a member of a family that was started by Dr. Tony Herring 39 years ago. You will leave TSRHC with a comprehensive set of surgical skills, knowledge and experience that will serve you well throughout your career as a pediatric orthopedic surgeon. You will be joining a group of more than 175 fellows throughout North America and the world who continue the TSRHC tradition of taking great care of children. I hope to see you.

— **DR. DANIEL J. SUCATO**, Chief of Staff

Click here to see a
welcome message from
Dr. Daniel J. Sucato.



TSRHC's Fellowship in Pediatric Orthopedics and Scoliosis



TSRHC Fellows have the opportunity to:

- Work in an interactive environment that supports learning.
- Become a frontline member of the patient care team.
- Care for children with a wide array of pediatric orthopedic conditions, including rare cases that physicians elsewhere may never see during their careers.
- Learn from a diverse variety of opinions.

The TSRHC fellowship is an extraordinary clinical training program that allows physicians to master the skills they need to manage the full gamut of pediatric orthopedic and spine deformity problems.

The program provides in-depth training in reconstructive pediatric orthopedics, trauma and infection and takes place in a unique collegial learning environment that supports intensive, thorough education. No other institution in the nation offers five yearlong accredited fellowship positions.

The hospital is a busy pediatric orthopedic referral center, and the fellow is a frontline member of the patient care team.

“This fellowship is more than a program. It is the beginning of a lifelong dedication to the acquisition of knowledge and skill and a habit of questioning dogma,” said Dr. Tony Herring, TSRHC chief of staff emeritus.

Residents in orthopedic surgery should apply for the one-year program in their postgraduate third or fourth year. Other physicians who have completed orthopedic training may also apply.

“It really is a foundation in all facets of pediatric orthopedics,” said 2012-13 Fellow Dr. Rebecca Clinton.

TSRHC physicians and fellows (back row, left to right): Harry Kim, Christine Ho, Scott Oishi, Shane Miller, Philip Wilson, David Podeszwa, Lawson Copley, Henry Ellis, Karl Rathjen, Brandon Ramo, Tony Riccio, Charles Johnston, Mikhail Samchukov, Lane Wimberly, Amy McIntosh; (front row, left to right): Christopher Stutz, Jane Chung, Connor Green, Elizabeth Hubbard, Shawn Funk, Tony Herring, Dan Sucato, Steve Richards, Rachel Thompson, Philip McClure, Andreas Weber, John Birch, Alexander Cherkashin, Lori Karol.

The fellowship includes:

- Training with the largest and most experienced pediatric orthopedic staff in the country. The hospital's 19 orthopedic surgeons have 200 years in combined experience and hold faculty appointments at The University of Texas Southwestern Medical Center. Many are leaders of national medical associations, including POSNA, SRS and IMAST.
- Experience treating rare and complex spine, hip and extremity disorders referred to TSRHC because of its reputation for solving challenging orthopedic problems. The Plano campus also offers a Pediatric Fracture Clinic, where fellows can learn about the diagnosis, management and treatment of fractures in patients whose growing bones require special attention.
- Opportunities to learn and practice sports medicine at the TSRHC Sports Medicine practice in Plano, including participating in arthroscopic and other sports-related surgical procedures.
- Rotations at Children's Health, one of only two Level 1 trauma centers in Texas, managing fractures and other acute orthopedic conditions. The rotations include participation in the JACHO-certified musculoskeletal infection service directed by TSRHC's Dr. Lawson Copley and the busy pediatric orthopedic hand service managed by TSRHC's Dr. Christine Ho.
- Research projects at an institution known for its discovery of genes implicated in scoliosis and juvenile arthritis and its patented devices for the treatment of scoliosis and limb differences. The projects are appropriate for scientific meetings and publication.
- A collegial attitude in which each case is rigorously and openly debated to ensure the best outcomes for patients.

The fellowship program begins August 1 and is accredited by the Accreditation Council for Graduate Medical Education.

***Residents and foreign medical graduates need to apply through the San Francisco Matching Program to be considered for a fellowship position at TSRHC.**

To see a video on the fellowship experience, please click here.



Texas Scottish Rite Hospital for Children (TSRHC) acknowledges OMeGA Medical Grants Association and the support of DePuy Synthes, Medtronic, and K2M, Inc. for a generous Pediatric Orthopedic Fellowship grant.

2016 Fellow Dr. Rachel Thompson with patient Isaac, age 16, of Guadalajara, Mexico



*Monday night conference
with 2016 Fellow
Dr. Elizabeth Hubbard
presenting*

Conference Schedule

Fellows participate in weekly and monthly didactic conferences. The hospital also hosts visiting professors to provide fellows the opportunity to collaborate with experts in the field. Additionally, fellows and staff physicians attend bimonthly journal clubs during which attendees review articles from peer-reviewed orthopedic journals.

The schedule includes:

- Monday evening preoperative indications and surgical planning conferences, the 2-1/2-hour crown jewel of our educational component. Varied opinions are considered, enhancing decision making in complex situations.
- Tuesday morning core curriculum lectures in pediatric orthopedics by TSRHC physicians, outside doctors, residents and fellows, followed by morning presentations of interesting and complex cases.
- First Wednesday of every month, a hand and upper extremity conference.
- Remaining Wednesdays alternating between spine, hip and limb reconstruction conferences and neuromonitoring case reviews.
- Thursday morning fracture conferences at Children's Health.
- Friday morning postoperative case conferences - detailed review of the surgical cases of the week.
- One-on-one teaching conferences with individual orthopedic staff surgeons covering topics such as spine deformity, hip dysplasia and limb lengthening and reconstruction.



From top: Staff Drs. Harry Kim and Karl Rathjen; 2016 Fellow Dr. Rachel Thompson; 2016 Fellow Dr. Philip McClure

Surgical Experience



The high level surgical experience at TSRHC encompasses a large number of cases with a significant variety of pathology and a wide spectrum of complexity, from the straightforward to the very challenging. Fellows play an integral role in all aspects of surgery, including preoperative evaluations and postoperative care and follow-up. They work with a single attending physician for one- to two-month rotations, providing an opportunity to assess patients, plan and perform surgery and conduct and observe follow-up care with the same attending surgeon.



TSRHC physicians and fellows perform 2,500 surgeries at TSRHC and Children's Health annually and receive training and experience in:

- Posterior spinal fusions and instrumentations
- Growing rod placement and lengthening
- Spinal osteotomies, kyphectomies, hemivertebrae excisions and vertebral column resections
- Mehta casting for early onset scoliosis
- Pelvic osteotomies (Salter, Pemberton, etc.)
- Ganz periacetabular osteotomy
- Surgical hip dislocation, knee and hip arthroscopy
- ACL reconstruction
- Growth modulation
- Limb lengthening and reconstruction by the Ilizarov method and PRECISE® Intramedullary Nails
- Clubfoot management
- Foot and upper extremity reconstruction

Clockwise from top: 2016 Fellow Dr. Rachel Thompson; 2016 Fellow Dr. Philip McClure and Dr. Charles Johnston; Drs. Tony Riccio and John Birch and 2016 Fellow Dr. Shawn Funk; 2016 Fellow Dr. Rachel Thompson; Dr. Dan Sucato and 2016 Fellow Dr. Connor Green.

Operating facilities and staff at TSRHC include:

- Four operating suites and one "plaster room" for cast application/changes and arthrograms, all dedicated to orthopedic surgery and featuring state-of-the-art lighting, video monitoring, video conferencing capability, digital photography and the ability to record surgical procedures at the touch of a button.
- The highest quality surgical equipment, including radiolucent spine tables, endoscopic instruments, microscope and fluoroscopy units with intraoperative CT scanning capability.
- Ancillary technology, such as spinal cord monitoring, cell saver and postoperative pain management techniques, including pain balls, PCA and epidural analgesia.
- Seven full-time pediatric anesthesiologists, a pain management nurse coordinator and 30 surgical nurses, all dedicated to orthopedics.



Educational Opportunitites



Dr. Muharrem Yazici presents at the 2015 Fall Orthopedic Symposium

TSRHC provides its fellows support for educational opportunities both on and off campus. Each fellow receives a \$2,500 educational allowance to attend national seminars.

Guided by TSRHC staff, fellows participate in bioskills lab training several times during the fellowship year. Each session consists of multiple areas of focus, including spine, hip, lower extremity and hand.

The fellows also attend receptions at AAOS and POSNA annual meetings for former TSRHC fellows, hosted each year by the hospital's pediatric orthopedic surgeons.

These opportunities for collaboration offer fellows the experience and relationships needed for a successful career in pediatric orthopedics.

Fall Symposium Visiting Professors

- 2016 Hubert Labelle, M.D. and Stefan Parent, M.D.
- 2015 Muharrem Yazici, M.D.
- 2014 John G. Birch, M.D. and Charles E. Johnston, M.D.
- 2013 Paul D. Sponseller, M.D., M.B.A.
- 2012 Reinhold Ganz, M.D.
- 2011 Se-Il Suk, M.D., Ph.D.
- 2010 William G. MacKenzie M.D.
- 2009 Christopher W. Reilly, M.D. and Alexander Vaccaro, M.D., Ph.D., F.A.C.S.
- 2008 Jacques L. D'Astous, M.D. and Min H. Mehta, M.B.B.S., F.R.C.S.
- 2007 Oheneba Boachie-Adjel, M.D.
- 2006 Harry L. Shufflebarger, M.D. and David S. Bradford, M.D.
- 2005 John B. Emans, M.D.; Lawrence Lenke, M.D.; Peter J. Newton, M.D.; and Randal Betz, M.D.
- 2004 Robert Campbell, M.D.

Fall Spine Symposium

Each fall, the Sarah M. and Charles E. Seay/Martha and Pat Beard Center for Excellence in Spine Research at TSRHC hosts a symposium as part of its ongoing commitment to innovative research efforts and improving treatment for children with scoliosis and other orthopedic conditions. Visiting professors and health care practitioners, fellows and TSRHC staff present cases with the goal of deepening our understanding of orthopedic treatment. The T. Boone Pickens Birthday Fund underwrites the symposium.

The 13th annual symposium will be held Oct. 28 in the T. Boone Pickens Training and Conference Center at TSRHC. The symposium features Drs. Hubert Labelle and Stefan Parent, Canadian orthopedic surgeons who teach in the Department of Surgery at the University of Montreal. Dr. Labelle is also the university's Research Chair in Movement Sciences and Head of Orthopedics at the affiliated Sainte-Justine University Hospital. Dr. Parent is the Academic Research Chair in Spinal Deformities at Sainte-Justine and Deputy Head of the Musculoskeletal Diseases and Rehabilitation Axis at the Sainte-Justine Research Center.

Brandon Carrell Visiting Professorship

For more than 30 years, TSRHC's Orthopedic department has presented the Brandon Carrell Visiting Professorship. The annual course is designed for pediatric orthopedic surgeons and other surgeons with an interest in current pediatric orthopedic practices and brings together prominent physicians to discuss the latest advancements in spine deformity treatment and research. Fellows have an opportunity to present their research projects along with the visiting professor, TSRHC physicians and researchers, and other visiting orthopedic surgeons.

The 38th annual Brandon Carrell Visiting Professorship was held June 3-4, 2016, with visiting professor Dr. Gregory A. Mencio.

Dr. Mencio is professor of Orthopaedics and Rehabilitation at Monroe Carell Jr. Children's Hospital at Vanderbilt in Nashville, Tenn., and director of the hospital's Pediatric Orthopaedic Section and Spina Bifida Clinic.

The Brandon Carrell Visiting Professorship was inaugurated in 1978 in honor of Dr. Carrell's lifelong contribution to pediatric orthopedics. Dr. Carrell was TSRHC's second chief of staff, serving from 1945 to 1978. He continued in an active role as chief of staff emeritus until his death in 1981. He improved the lives of thousands of children from all walks of life and taught scores of young orthopedists the principles and practice of pediatric orthopedics.

Brandon Carrell Visiting Professors

2016	Gregory A. Mencio, M.D.	1995	Robert Gillespie, M.D., Ch.B., F.R.C.S.(C.) (Ed)
2015	John E. Herzenberg, M.D.	1994	Kaye E. Wilkins, M.D.
2014	Benjamin A. Alman, M.D., F.R.C.S.(C.)	1993	Vernon T. Tolo, M.D.
2013	Vincent Mosca, M.D.	1992	Norris Carroll, M.D.
2012	Gerard Bollini, M.D.	1991	Stuart Weinstein, M.D.
2011	Peter M. Waters, M.D.	1990	John H. Wedge, M.D.
2010	H. Kerr Graham, M.D.	1989	Alain Dimeglio, M.D.
2009	Jack Flynn, M.D. and John Hall, M.D.	1988	Lynn T. Staheli, M.D.
2008	J. A. "Tony" Herring, M.D.	1987	Howard H. Steel, M.D.
2007	John P. Dormans, M.D.	1986	Robert Hensinger, M.D.
2006	James W. Roach, M.D.	1985	Alvin H. Crawford, M.D.; Dean Macewen, M.D.; and Raymond T. Morrissy, M.D.
2005	Perry L. Schoenecker, M.D.	1984	Eugene E. Bleck, M.D.
2004	Dror Paley, M.D., F.R.C.S.(C.)	1983	Mihran O. Tachdjian, M.D.
2003	Jürgen Harms, M.D. (Germany)	1982	Sherman Coleman, M.D.
2002	Reinhold Ganz, M.D. (Switzerland)	1981	Ignacio V. Ponseti, M.D.
2001	Richard H. Gross, M.D. and J. Andy Sullivan, M.D.	1980	George Lloyd-Roberts, M.D.
2000	James R. Kasser, M.D.	1979	John E. Hall, M.D. and Anthony Caterall, M.D.
1999	Charles T. Price, M.D.	1978	Eduardo Luque, M.D. and Mercer Rang, M.D.
1998	Dennis R. Wenger, M.D.		
1997	Raymond T. Morrissy, M.D.		
1996	Jean Dubousset, M.D.		

*Dr. Gregory Mencio, 2016
Brandon Carrell Visiting Professor*

Fellowship Programs



Left to right: 2016 Edwards Fellows Drs. Connor Green, Shawn Funk and Rachel Thompson; Connie Cannedy and Mac Cannedy, Bryant Edwards Foundation president; 2016 Edwards Fellows Drs. Philip McClure and Elizabeth Hubbard; Chief of Staff Dr. Dan Sucato.

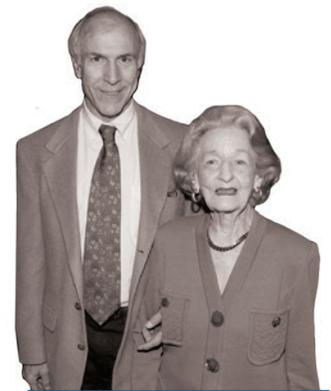
Bryant Edwards Foundation, Inc.

In the early 1940s, Dorothy and Bryant Edwards were moved by the mission of TSRHC when the 3-year-old daughter of one of their ranch hands was treated for polio at the hospital. When the young child returned to the ranch, Bryant noticed that she had received outstanding care and was amazed that the hospital did not present the family with a bill.

Intrigued by TSRHC's commitment to putting children first, the couple began a long-standing relationship with the hospital through their generous support of pediatric orthopedic medical education.

In the late 1980s on one of her many visits to the hospital, Dorothy set up an endowment to support the fellowship program at TSRHC. In honor of these longtime friends, the Dorothy and Bryant Edwards Fellowship in Pediatric Orthopedics and Scoliosis was established to create a legacy of helping children throughout the world by providing exceptional training for young physicians.

Today, Mac Cannedy serves as president of the Bryant Edwards Foundation, Inc. Mac and his wife, Connie, and their family remain dedicated to the hospital and have continued to support the legacy of Dorothy and Bryant through the Edwards Fellowship.



Dr. Tony Herring and Dorothy Edwards, 1997

John and Ellen McStay International Fellowship

John and Ellen McStay are longtime friends and supporters of the hospital. In 1991, they created the John and Ellen McStay Foreign Fellowship Fund to honor their friend, Dr. Tony Herring.

The fund supports training in pediatric orthopedics to an international fellow at TSRHC, bolstering the hospital's commitment to global excellence in patient care, research and education and promoting a lifelong enthusiasm for learning, practicing and teaching pediatric orthopedics.



Ellen and John McStay

**John S. Appleton Fellowship
in Spine Research**

The John S. Appleton Fellowship in Spine Research was established in memory of John S. Appleton, a good friend and longtime supporter of the hospital. John was introduced to TSRHC in 1990 by Charles E. Seay, Jr. and became involved in the Tartan Golf Classic, an annual tournament benefiting the hospital. He joined the Tartan board, serving as chairman in 1994 and as a tournament sponsor for 11 years.

Proceeds from the 2005 Tartan Golf Classic auction were designated to fund the Appleton Fellowship, a research position in the Sarah M. and Charles E. Seay/Martha and Pat Beard Center for Excellence in Spine Research. John and his wife, Deborah, shared a commitment and enthusiasm for TSRHC that lives on through the fellowship and the patients treated at the hospital each day.



John S. Appleton

**L. Ray Lawson, M.D.,
International Pediatric Spine
Research Fellowship**

Throughout his career, Dr. Ray Lawson had an abiding love for TSRHC and dedication to the care of young patients with spinal deformities. Dr. Lawson was instrumental in developing anterior approaches to the spine and performed the first spinal surgery using the groundbreaking Harrington Rod at TSRHC. He was also responsible for establishing the hospital's first scoliosis clinic and was a founding member of the national Scoliosis Research Society (SRS). In 1999, the SRS awarded Dr. Lawson the prestigious Walter Blount Lifetime Achievement Award.

To honor his dedication to the field of pediatric spinal deformities, the L. Ray Lawson, M.D., International Pediatric Spine Research Fellowship was established in his memory in 2012 to provide educational opportunities to young doctors from around the globe who share his passion.



Dr. L. Ray Lawson

**A.C. and Eleanor M.
Garison Fellowship
in Hand and Upper
Limb Treatment**

A.C. and Eleanor M. Garison shared their enthusiasm for life through their dedication to the Dallas community, including their support of TSRHC. Established in 2013, the A.C. and Eleanor M. Garison Fellowship in Hand and Upper Limb Treatment extends the legacy of this loving couple by providing advanced educational opportunities for the next generation of hand surgeons.

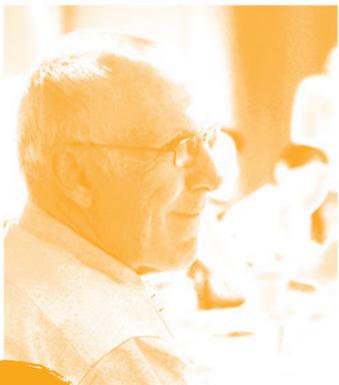
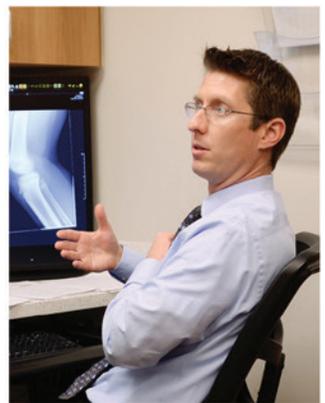
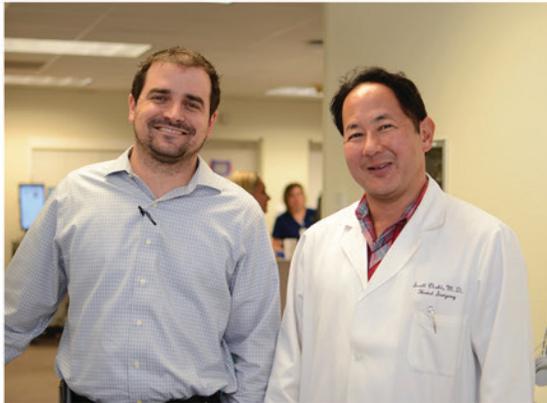
TSRHC is one of only five pediatric orthopedic hospitals in the world to offer a fellowship in pediatric hand and upper extremity treatment and has trained more than 100 hand fellows.



A.C. and Eleanor M. Garison

Learn from the Experts

The Pediatric Orthopedists of Texas Scottish Rite Hospital for Children





CHIEF OF STAFF

DANIEL J. SUCATO, M.D., M.S.

Academic Affiliation:

- UT Southwestern Medical Center
Department of Orthopaedic Surgery, *Professor*

Affiliations:

- Texas Scottish Rite Hospital for Children
- Children's Health
- Parkland Health & Hospital System
- UT Southwestern University Hospital – St. Paul
- UT Southwestern James W. Aston Ambulatory Care Center

Education:

- State University of New York at Buffalo, School of Medicine, *Magna Cum Laude*

Residency:

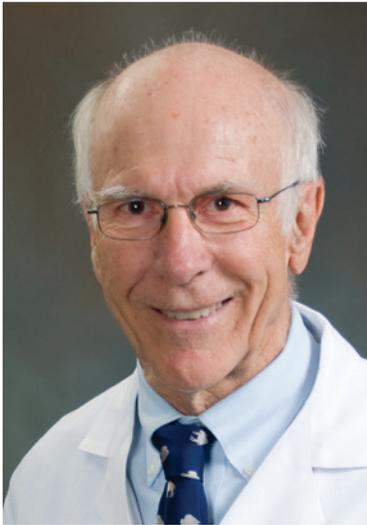
- State University of New York at Buffalo, School of Medicine, Orthopaedic Surgery

Fellowships:

- State University of New York at Buffalo, School of Medicine, Basic Science Research
- Texas Scottish Rite Hospital for Children, Dorothy and Bryant Edwards Fellowship in Pediatric Orthopedics and Scoliosis
- Inselspital, Bern, Switzerland
Professor Reinhold Ganz, Hip Preserving Surgery

Board Certification:

- American Board of Orthopaedic Surgery, 2010



CHIEF OF STAFF EMERITUS

J. A. "TONY" HERRING, M.D.

Academic Affiliation:

- UT Southwestern Medical Center
Department of Orthopaedic Surgery, *Professor*

Affiliations:

- Texas Scottish Rite Hospital for Children
- Children's Health
- Parkland Health & Hospital System
- UT Southwestern University Hospital – St. Paul

Education:

- Baylor University College of Medicine,
Alpha Omega Alpha

Residency:

- Harvard Combined Orthopaedic Program – Orthopaedic Surgery

Fellowships:

- Harvard University Surgical Research
- Berg Sloat Traveling Fellowship, 1975

Board Certification:

- American Board of Orthopaedic Surgery, 1974



CHIEF MEDICAL OFFICER

B. STEPHENS "STEVE" RICHARDS, M.D.

Academic Affiliation:

- UT Southwestern Medical Center
Department of Orthopaedic Surgery, *Professor*

Affiliations:

- Texas Scottish Rite Hospital for Children
- Children's Health
- Parkland Health & Hospital System
- Presbyterian Hospital of Dallas
- UT Southwestern University Hospital – St. Paul

Education:

- St. Louis School of Medicine

Residency:

- University of Utah
Orthopaedic Surgery

Fellowship:

- Texas Scottish Rite Hospital for Children, Harrington Fellowship of Pediatric Orthopaedics and Scoliosis

Board Certifications:

- National Board of Medical Examiners diplomate, 1982
- Passed Written Boards in Orthopaedics, 1986
- Passed Oral Boards in Orthopaedics, 2006



ASSISTANT CHIEF OF STAFF AND MEDICAL DIRECTOR OF MOVEMENT SCIENCE LABORATORY AND PERFORMANCE IMPROVEMENT

LORI A. KAROL, M.D.

Academic Affiliation:

- UT Southwestern Medical Center
Department of Orthopaedic Surgery,
Professor

Affiliations:

- Texas Scottish Rite Hospital for Children
- Children's Health

Education:

- University of Michigan Medical School

Residency:

- Wayne State University School of Medicine
Orthopaedic Surgery

Fellowship:

- Texas Scottish Rite Hospital for Children, Dorothy and Bryant Edwards Fellowship in Pediatric Orthopedics and Scoliosis

Board Certification:

- American Board of Orthopaedic Surgery 2011



ASSISTANT CHIEF OF STAFF AND PRESIDENT OF THE TEXAS SCOTTISH RITE HOSPITAL FOUNDATION

KARL E. RATHJEN, M.D.

Academic Affiliation:

- UT Southwestern Medical Center
Department of Orthopaedic Surgery,
Professor

Affiliations:

- Texas Scottish Rite Hospital for Children
- Texas Scottish Rite Foundation
President
- Children's Health,
Division Director of Pediatric Orthopaedic Services
- Parkland Health & Hospital System

Education:

- UT Southwestern Medical School, *Alpha Omega Alpha*

Residency:

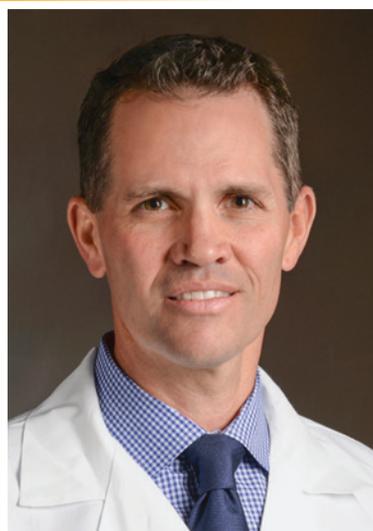
- UT Southwestern Medical Center
Orthopaedic Surgery

Fellowship:

- Children's Hospital of San Diego
University of California, San Diego
Pediatric Orthopaedics

Board Certification:

- American Board of Orthopaedic Surgery, 2005



ASSISTANT CHIEF OF STAFF

PHILIP L. WILSON, M.D.

Academic Affiliation:

- UT Southwestern Medical Center
Department of Orthopaedic Surgery,
Associate Professor

Affiliations:

- Texas Scottish Rite Hospital for Children
- Children's Health

Education:

- UT Southwestern Medical School

Residency:

- UT Southwestern Medical Center
Orthopaedic Surgery

Fellowships:

- Children's Hospital of San Diego
Pediatric Orthopaedics
- ADIDAS Sports Medicine Clinics
Arthroscopy/Sports Medicine
Auckland, New Zealand

Board Certification:

- American Board of Orthopaedic Surgery, 2004



ASSISTANT CHIEF OF STAFF EMERITUS

JOHN G. BIRCH, M.D.

Academic Affiliation:

- UT Southwestern Medical Center Department of Orthopaedic Surgery, *Professor*

Affiliations:

- Texas Scottish Rite Hospital for Children
- Children's Health

Education:

- University of Western Ontario, London, Ontario, Canada

Residencies:

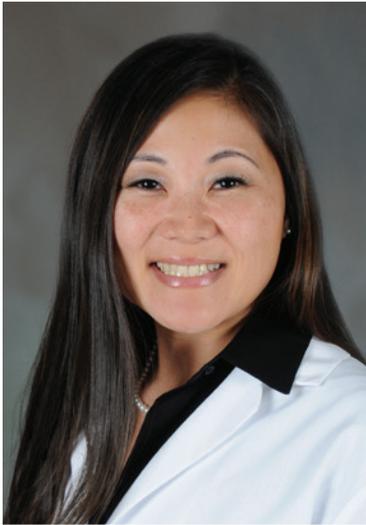
- University of Ottawa, Ottawa, Ontario, Canada
- University of Florida

Fellowships:

- Newington Children's Hospital, Newington, Connecticut
- Alfred I. DuPont Institute, Wilmington, Delaware
- Texas Scottish Rite Hospital for Children, Harrington Fellowship of Pediatric Orthopedics and Scoliosis
- University of Ottawa – Sports Medicine, Ottawa, Ontario, Canada

Board Certifications:

- Royal College of Physicians and Surgeons of Canada, *fellow*, 1980
- American Board of Orthopaedic Surgery, 2008



SPORTS MEDICINE PHYSICIAN

JANE S. CHUNG, M.D.

Academic Affiliation:

- UT Southwestern Medical Center, Department of Orthopaedic Surgery, *Assistant Professor*

Affiliations:

- Texas Scottish Rite Hospital for Children

Education:

- University of California, San Diego: B.S. in Biochemistry/Cell Biology
- St. George's School of Medicine: M.D.

Residency:

- Louisiana State University Health Sciences Center, Children's Hospital, Pediatrics

Fellowship:

- Case Medical Center, University Hospitals Rainbow Babies and Children's Hospital, Cleveland, Ohio, Sports Medicine

Board Certification:

- American Board of Pediatrics, Pediatrics, 2011
- American Board of Pediatrics, Sports Medicine, 2013



STAFF ORTHOPEDIC SURGEON

LAWSON A. B. COPLEY, M.D.

Academic Affiliation:

- UT Southwestern Medical Center, Department of Orthopaedic Surgery, *Professor*

Affiliations:

- Texas Scottish Rite Hospital for Children
- Children's Health Dallas

Education:

- The University of Kansas Medical Center, *Magna Cum Laude, Alpha Omega Alpha*

Residency:

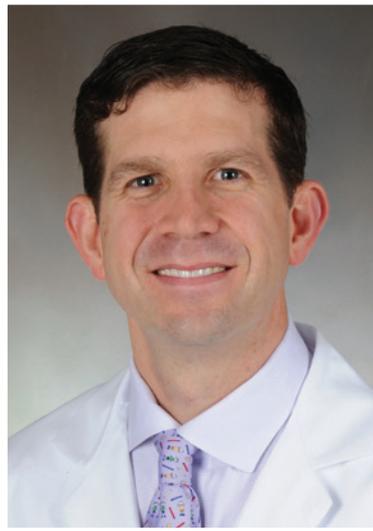
- University of Pennsylvania, Orthopaedic Surgery

Fellowship:

- Texas Scottish Rite Hospital for Children, Dorothy and Bryant Edwards Fellowship in Pediatric Orthopedics and Scoliosis

Board Certification:

- American Board of Orthopaedic Surgery, 2000



STAFF ORTHOPEDIC SURGEON
HENRY B. ELLIS, JR., M.D.

Academic Affiliation:

- UT Southwestern Medical Center
 Department of Orthopaedic Surgery,
Assistant Professor

Affiliations:

- Texas Scottish Rite Hospital for Children
- Children's Health

Education:

- The University of Texas Health Science Center
 San Antonio

Residency:

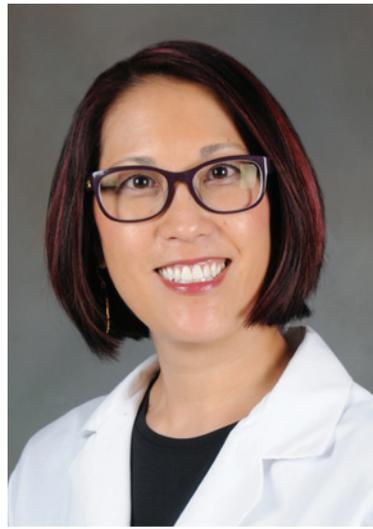
- UT Southwestern Medical Center
 Orthopaedic Residency

Fellowship:

- Steadman Philippon Research Institute and the Steadman Clinic, Vail, Colorado
 Sports Medicine Fellowship
- The Hospital for Sick Children,
 University of Toronto
 Pediatric Orthopaedic Fellowship

Board Certification:

- American Board of Orthopaedic Surgery, 2014



STAFF ORTHOPEDIC SURGEON
CHRISTINE HO, M.D.

Academic Affiliation:

- UT Southwestern Medical Center
 Department of Orthopaedic Surgery,
Associate Professor

Affiliations:

- Texas Scottish Rite Hospital for Children
- Children's Health
- Parkland Health and Hospital Systems
- UT Southwestern - Zale Lipshy
- UT Southwestern - St. Paul

Education:

- UT Southwestern Medical School

Residency:

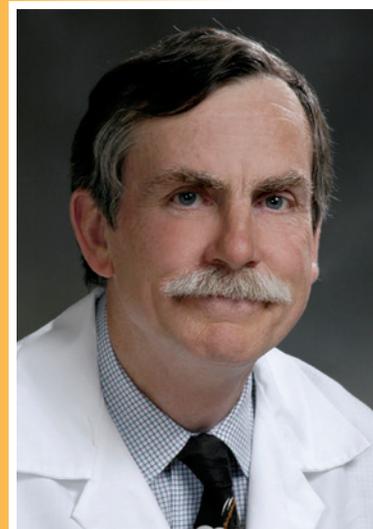
- University of Southern California Orthopaedic
 Surgery
 Resident Physician

Fellowships:

- Texas Scottish Rite Hospital for Children, Dorothy and Bryant Edwards Fellowship in Pediatric Orthopedics and Scoliosis
- Texas Scottish Rite Hospital for Children,
 Department of Pediatric Hand Surgery

Board Certification:

- American Board of Orthopaedic
 Surgery, 2009



ASSISTANT CHIEF OF STAFF EMERITUS
CHARLES E. JOHNSTON, M.D.

Academic Affiliation:

- UT Southwestern Medical Center
 Department of Orthopaedic Surgery,
Professor

Affiliations:

- Texas Scottish Rite Hospital for Children
- Children's Health
- Parkland Health & Hospital System
- Abilene State School
- Denton State School

Education:

- Columbia University College of
 Physicians and Surgeons

Residency:

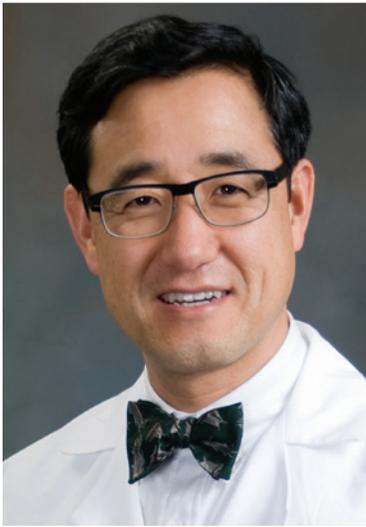
- University of Virginia Medical Center
 Orthopaedic Surgery

Fellowship:

- Texas Scottish Rite Hospital for Children,
 Harrington Fellowship of Pediatric
 Orthopedics and Scoliosis

Board Certification:

- American Board of Orthopaedic
 Surgery, 1984



DIRECTOR OF RESEARCH AT THE SARAH M. AND CHARLES E. SEAY CENTER FOR MUSCULOSKELETAL RESEARCH AND THE CENTER FOR EXCELLENCE IN HIP DISORDERS

HARRY KIM, M.D., M.S., FRCSC

Academic Affiliation:

- UT Southwestern Medical Center
Department of Orthopaedic Surgery,
Professor

Affiliation:

- Texas Scottish Rite Hospital for Children

Education:

- Medical Degree, McGill University
in Montreal, University Scholar

Residency:

- University of Toronto
Orthopaedic Residency

Fellowship:

- The Hospital for Sick Children,
University of Toronto
Pediatric Orthopaedic Fellowship

Board Certifications:

- American Board of Orthopaedic
Surgery, 2000
- Royal College of Physicians and
Surgeons of Canada, *fellow*, 1996



STAFF ORTHOPEDIC SURGEON

AMY L. MCINTOSH, M.D.

Academic Affiliation:

- UT Southwestern Medical Center
Department of Orthopaedic Surgery,
Associate Professor

Affiliations:

- Texas Scottish Rite Hospital for Children
- Children's Health

Education:

- Central Michigan University
B.S. Sports Medicine
- College of Human Medicine, Michigan State
University

Residency:

- Mayo School of Graduate Medical
Education, College of Medicine,
Mayo Clinic, Orthopaedic Surgery

Fellowship:

- Texas Scottish Rite Hospital for Children,
Dorothy and Bryant Edwards Fellowship in
Pediatric Orthopedics

Board Certification:

- American Board of Orthopaedic Surgery, 2009



SPORTS MEDICINE PHYSICIAN

SHANE M. MILLER, M.D.

Academic Affiliation:

- UT Southwestern Medical Center
Department of Orthopaedic Surgery,
Associate Professor
Department of Pediatrics,
Associate Professor

Affiliations:

- Texas Scottish Rite Hospital for Children
- Children's Health

Education:

- The University of Texas: B.A. Biology
- Baylor College of Medicine: M.D.

Internship:

- Baylor College of Medicine, Pediatrics

Residency:

- Baylor College of Medicine, Pediatrics

Fellowship:

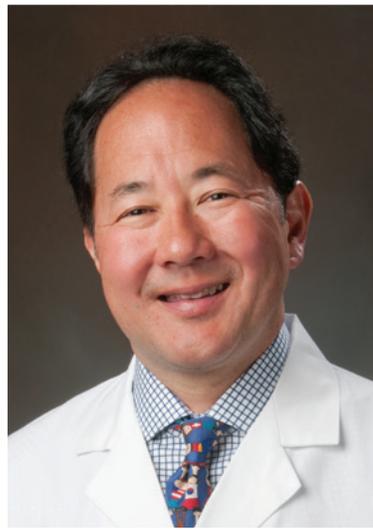
- University of Colorado Health Science
Center, Denver, Colorado
Pediatric Sports Medicine

Honors and Awards:

- American Academy of Pediatrics
Special Achievement Award – 2013

Board Certification:

- American Board of Pediatrics,
Pediatrics, Sports Medicine



DIRECTOR OF THE CHARLES E. SEAY, JR. HAND CENTER
SCOTT OISHI, M.D.

Academic Affiliations:

- UT Southwestern Medical Center
 Department of Plastic Surgery,
Professor
 Department of Orthopaedic Surgery,
Professor
- UT Southwestern Medical Center
Former Director Hand/Microsurgery Fellowship

Affiliations:

- Texas Scottish Rite Hospital for Children
- Park Cities Surgery Center (provisional)

Education:

- Tufts University School of Medicine

Residencies:

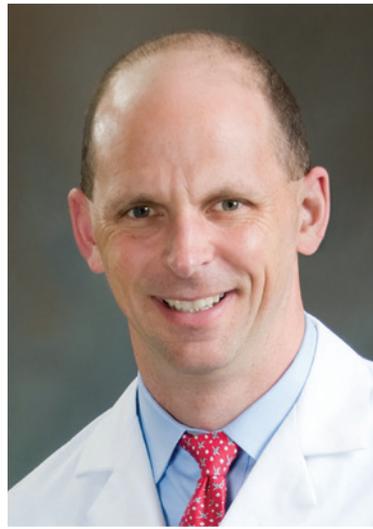
- The University of Texas Health Science Center at San Antonio, General Surgery
- University of Kentucky Chandler Medical Center, Plastic Surgery

Fellowship:

- UT Southwestern Medical Center
 Hand Microvascular

Board Certifications:

- The American Board of Plastic Surgery, diplomate
- Certificate of Added Qualifications in Surgery of the Hand



STAFF ORTHOPEDIC SURGEON
DAVID A. PODESZWA, M.D.

Academic Affiliation:

- UT Southwestern Medical Center
 Department of Orthopaedic Surgery,
Associate Professor

Affiliations:

- Texas Scottish Rite Hospital for Children
- Children's Health
- UT Southwestern University Hospital – St. Paul
- Parkland Health & Hospital System

Education:

- Wayne State University School of Medicine

Residency:

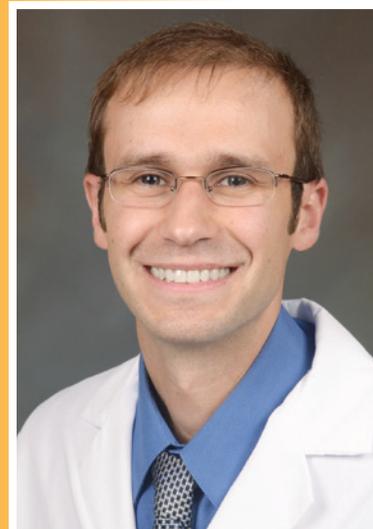
- Wayne State University School of Medicine
 Orthopaedic Surgery

Fellowships:

- Texas Scottish Rite Hospital for Children, Dorothy and Bryant Edwards Fellowship in Pediatric Orthopedics and Scoliosis
- AO ASIF International Fellowship Inselspital, Bern, Switzerland, Professor Reinhold Ganz, Hip Preserving Surgery

Board Certification:

- American Board of Orthopaedic Surgery, 2003



STAFF ORTHOPEDIC SURGEON
BRANDON A. RAMO, M.D.

Academic Affiliation:

- UT Southwestern Medical Center
 Department of Orthopaedic Surgery,
Assistant Professor

Affiliations:

- Texas Scottish Rite Hospital for Children
- Children's Health

Education:

- Washington University in St. Louis
 School of Medicine: M.D.

Residency:

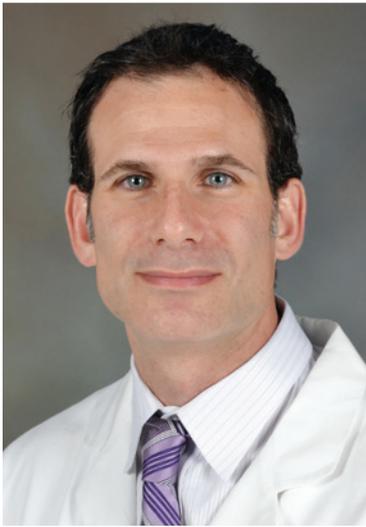
- Vanderbilt University
 Orthopaedic Surgery

Fellowship:

- Texas Scottish Rite Hospital for Children, Dorothy and Bryant Edwards Fellowship in Pediatric Orthopedics

Board Certification:

- American Board of Orthopaedic Surgery, 2014



STAFF ORTHOPEDIC SURGEON
ANTHONY I. RICCIO, M.D.

Academic Affiliations:

- UT Southwestern Medical Center
Department of Orthopaedic Surgery,
Associate Professor
- The Uniformed Services School of Health
Sciences in Bethesda, M.D.
Associate Professor

Affiliations:

- Texas Scottish Rite Hospital for Children
- Children's Health
- Parkland Health & Hospital System

Education:

- Georgetown University School of Medicine

Residency:

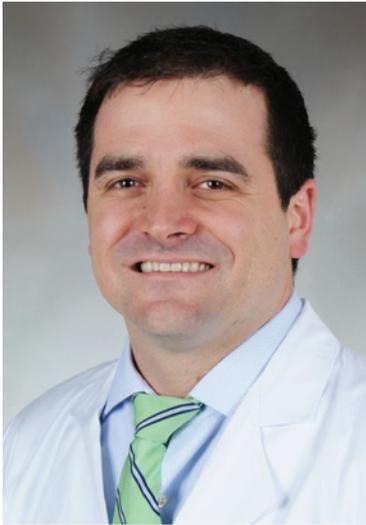
- Georgetown University School of Medicine -
Orthopaedic Surgery

Fellowship:

- Texas Scottish Rite Hospital for Children,
Dorothy and Bryant Edwards Fellowship in
Pediatric Orthopedics

Board Certification:

- American Board of Orthopaedic Surgery



STAFF HAND SURGEON
CHRISTOPHER STUTZ, M.D.

Academic Affiliations:

- UT Southwestern Medical Center
Department of Orthopaedic Surgery,
Assistant Professor

Affiliations:

- Texas Scottish Rite Hospital for Children
- Children's Health
- UT Southwestern Medical Center

Education:

- University of Texas Health Science Center at
Houston Medical Center

Residencies:

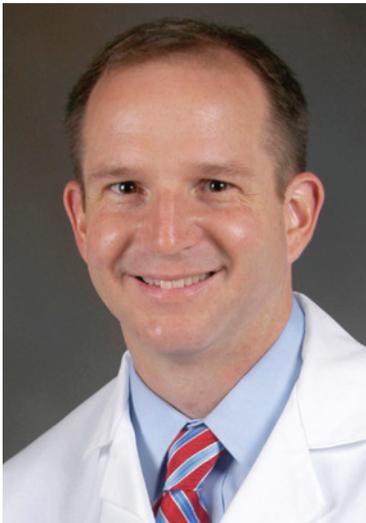
- Vanderbilt University Medical Center
Orthopaedics
Rehabilitation

Fellowship:

- Washington University
Hand and Microvascular Surgery

Board Certifications:

- American Board of Orthopaedic Surgery, 2014



STAFF ORTHOPEDIC SURGEON
R. LANE WIMBERLY, M.D.

Academic Affiliation:

- UT Southwestern Medical Center
Department of Orthopaedic Surgery,
Associate Professor

Affiliations:

- Texas Scottish Rite Hospital for Children
- Children's Health

Education:

- Baylor College of Medicine

Residency:

- Georgetown University Hospital
Orthopaedic Surgery

Fellowship:

- Texas Scottish Rite Hospital for Children,
Dorothy and Bryant Edwards Fellowship in
Pediatric Orthopedics and Scoliosis

Board Certification:

- American Board of Orthopaedic
Surgery, 2006

HOSPITAL DEPARTMENTS

ANESTHESIOLOGY

The department of Anesthesiology consists of seven full-time, fellowship-trained pediatric anesthesiologists who provide anesthesia coverage in the operating rooms. In addition, the Anesthesiology department manages an active acute pain management service with the help of a pain management nurse practitioner. Dr. Cyndi Woerz is medical director.



CYNDI WOERZ, M.D.



MOUIN SEIKALY, M.D.

METABOLIC CLINIC

The Metabolic Clinic treats more than 150 patients with rickets, osteogenesis imperfecta and osteoporosis each year. Dr. Mouin Seikaly, a nephrologist, consulting staff member at TSRHC and professor at UT Southwestern Medical Center, serves as the medical director of the clinic. Dr. Seikaly oversees renal and bone mineral density evaluations in patients to monitor the toxicity of the medications used to treat rickets and its effect on patients' kidneys.

RHEUMATOLOGY

The Rheumatology department provides treatment for more than 1,500 patients with juvenile arthritis, systemic lupus, juvenile dermatomyositis, scleroderma, mixed connective tissues diseases, periodic fever syndromes, sarcoidosis and fibromyalgia.

Led by medical director Dr. Marilyn Punaro, the department conducts clinics, clinical research and clinical drug studies. Orthopedic fellows are welcome to rotate through Rheumatology.



MARILYNN PUNARO, M.D.



JEFFREY BLACK, M.D.

LUKE WAITES CENTER FOR DYSLEXIA AND LEARNING DISORDERS

The Luke Waites Center for Dyslexia and Learning Disorders provides one of the most comprehensive programs for childhood learning disorders in the nation. Founded by Dr. Lucius Waites in 1965, the center is dedicated to serving children through innovative evaluation, treatment and education, as well as extensive outreach, educator and physician training programs and research. The center is led by medical director Dr. Jeffrey Black and administrative director Gladys Kolenovsky.

HOSPITAL DEPARTMENTS



RICHARD ADAMS, M.D.

PEDIATRIC DEVELOPMENTAL DISABILITIES

The Pediatric Developmental Disabilities division is committed to the attainment of optimal biological, psychological and social wellness for orthopedic patients with special health care needs. Led by medical director Dr. Richard Adams, a member of UT Southwestern Medical Center's department of Pediatrics, the division provides outpatient and inpatient management primarily for patients in the spina bifida program and for children with cerebral palsy and other neurodevelopmental conditions. It has an active research component with a senior research scientist and a research nurse.

NEUROLOGY

The Neurology department provides care for orthopedic patients with related neurological and neuromuscular disorders. These include developmental delay, cerebral palsy, brain malformations, epilepsy and other conditions due to brain abnormalities, childhood motor disorders, tuberous sclerosis complex (TSC), holoprosencephaly (HPE) and peripheral nerve disorders. Led by Dr. Mauricio Delgado, medical director of Neurology,

and Dr. Steven Sparagana, medical director of Neurophysiology, the department is active in research and has an international reputation as one of the leaders in the areas of cerebral palsy, HPE and TSC.



MAURICIO DELGADO, M.D.



STEVEN SPARAGANA, M.D.



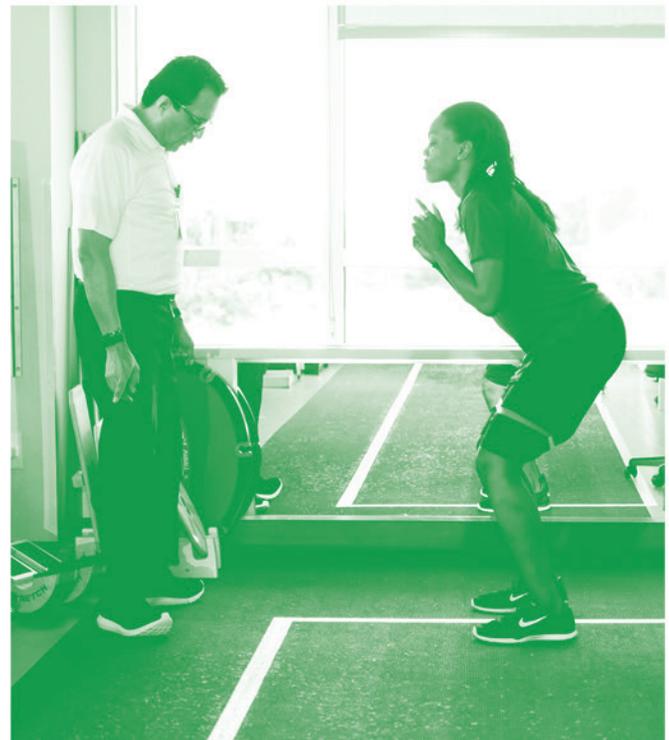
MOLLY DEMPSEY, M.D.

RADIOLOGY

The Radiology department images children with a wide range of orthopedic conditions and is staffed by four radiologists with expertise in pediatric musculoskeletal imaging. Groundbreaking, state-of-the-art 2D and 3D imaging equipment known as EOS allows us to capture more accurate images in a shorter amount of time while exposing patients to significantly less radiation. The technical staff includes multimodality radiographers, sonographers, CT and MRI technologists and two radiology sedation nurses who manage the three-room sedation suite. Radiology performs about 30,000 examinations each year and operates in a filmless environment using Carestream CR and DR and a Fuji Synapse PACS. Monitors allow image viewing throughout the hospital, including the operating suites. Dr. Molly Dempsey is medical director of Radiology.

Patient-Centered Care

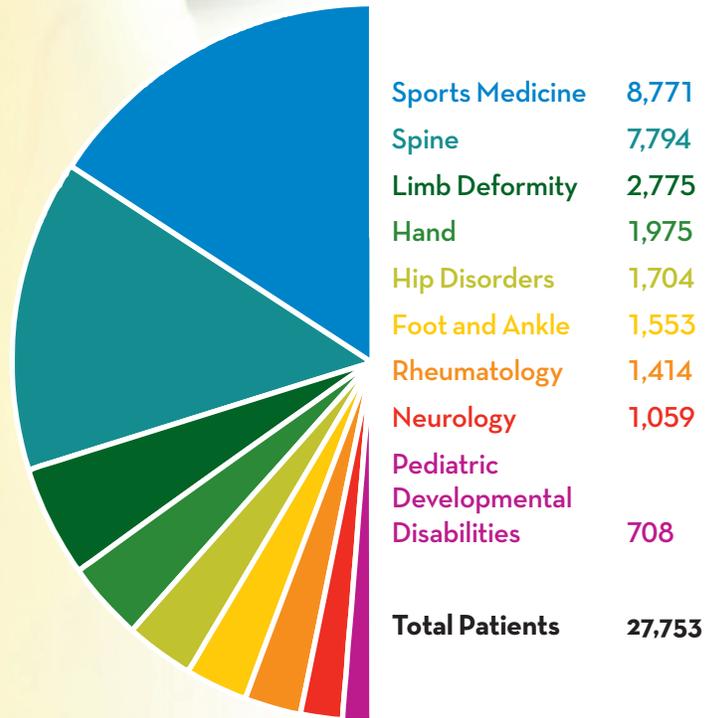
The Children of Texas Scottish Rite Hospital for Children



Patient Statistics

At TSRHC, fellows are included in the active services of 19 board-certified pediatric orthopedic surgeons. Each surgeon has expertise in general pediatric orthopedics and scoliosis.

ACTIVE PATIENTS BY DIAGNOSIS



CLINIC VISITS

General Orthopedics* 20,884

TOTAL VISITS
44,425

Scoliosis 7,432

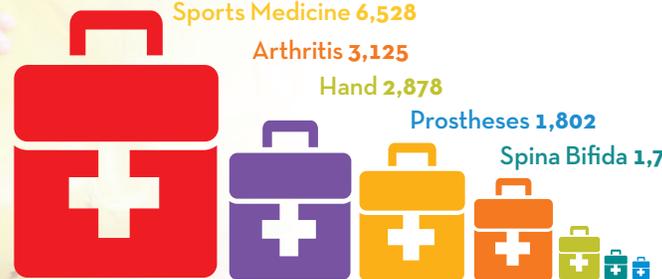
Sports Medicine 6,528

Arthritis 3,125

Hand 2,878

Prostheses 1,802

Spina Bifida 1,776



ORTHOPEDIC SURGERIES



CHILDREN'S HEALTH

Total Visits.....4,877

Total Surgeries.....606



* Statistics cover the period from August 2015 to July 2016

TSRHC patient Issac, age 3, of Mesquite

**Allison,
age 10, of Weatherford**

Facing scoliosis at a young age, Allison has been a patient at Scottish Rite Hospital for years, getting to know all the ups and downs of her diagnosis. But with her expert team at her side, as she grows she will be able to put all her troubles behind her.



Sarah M. and Charles E. Seay/Martha and Pat Beard Center for Excellence in Spine Research



Dr. Daniel J. Sucato, director of the Sarah M. and Charles E. Seay/Martha and Pat Beard Center for Excellence in Spine Research with TSRHC patient Baylor, age 9, of Marksville, La.

TSRHC has been a pioneer in spine surgery. In the 1970s, Dr. Tony Herring and the orthopedic staff began an aggressive program to develop new and innovative procedures and implant systems for treating spinal disorders. The Sarah M. and Charles E. Seay/ Martha and Pat Beard Center for Excellence in Spine Research, directed by Chief of Staff Dr. Daniel J. Sucato, provides a forum for experts from many disciplines to collaborate on specific challenges in spine surgery.

“One of our goals is to bring talented researchers with diverse backgrounds and skills to work together,” Dr. Sucato said. “This is a group that will set the bar high to solve the big problems and answer the unanswerable questions that we have today about spine deformity.”

The center is made up of:

The Division of TSRH® Spinal Implant Development, directed by Dr. Charles Johnston. The TSRH® Spinal System has been widely used for the treatment of spinal deformity for nearly two decades. TSRHC has improved on this foundation with the TSRH® SILO™ 5.5 Spinal System. This system provides a versatile option to treat all types of spine conditions, including deformity, trauma, tumor and degenerative conditions.

The Division of Creative Innovations and Novel Strategies for Treatment, directed by Dr. Hong “Johnny” Zhang.* The division concentrates on developing a better understanding of spinal deformity to promote the investigation of innovative treatment methods. *Medical degree from Tianjin Medical University in Tianjin, China

The Division of Clinical Scoliosis Research, directed by Dr. Brandon Ramo. The division oversees all retrospective and prospective clinical studies and promotes continued collaboration between TSRHC’s orthopedic staff, fellows, residents, nurses and research coordinators to address important issues for TSRHC’s spine patients.



2016 Fellow Dr. Elizabeth Hubbard and Dr. Amy McIntosh in the operating room

**Clayton,
age 18, of Ravenna**

When a flipped 4-wheeler landed on his leg, Clayton came to Scottish Rite Hospital to help the damaged part of his bone regrow. Thanks to this expert care not only was his leg saved, but he was able to get back to baseball, welding and working on his family ranch.



Center for Excellence in Limb Lengthening and Reconstruction

TSRHC initiated its limb lengthening and reconstruction research program in 1992, its scientific and clinical progress placing the hospital in a strong leadership position in limb reconstruction research and development in the United States and throughout the world.

Through the Center for Excellence in Limb Lengthening and Reconstruction, directed by Drs. David Podeszwa and Mikhail Samchukov, researchers work collaboratively with clinical and engineering staff to understand the mechanisms of new bone formation and soft tissue adaptation during gradual stretching.

The latest advance is the TRUE/LOK™ Hexapod System, or TL-HEX, developed by the Limb Lengthening team in collaboration with Orthofix. This next-generation, six-strut circular external fixator builds on the TRUE/LOK™ External Fixation System developed by the hospital in 1993.



Center for Excellence in Limb Lengthening and Reconstruction Research Team: Jennifer Rodgers, Dr. Lane Wimberly, Meaghan Wassel, Drs. David Podeszwa, Marina Marakov, Mikhail Samchukov, Lori Karol, Alexander Cherkashin and John Birch.

The center is made up of:

The Division of Tissue Adaptation and Neogenesis, directed by Dr. Marina Makarov.* The division, which manages all of the center's experimental studies, focuses on the areas of new bone formation under the influence of tensional stresses and soft tissue adaptation to gradual traction during distraction osteogenesis. *Medical degree from Omsk Medical School, Russia

The Division of Skeletal Fixation Systems Design, directed by Dr. Mikhail Samchukov.* The division coordinates the design, development, testing and implementation of the TRUE/LOK™ External Fixation System and focuses on developing new fixation systems for fracture reduction, deformity correction and limb lengthening. The division also supports the hospital's research staff in developing new techniques of distraction osteogenesis and external skeletal fixation devices for correcting limb deficiencies in different regions of the body. *Medical degree from Khabarovsk State Medical School, Russia

The Division of Clinical Implementation and Data Management, directed by Dr. Alexander Cherkashin.* The division coordinates all outcome studies involving computer-assisted data collection, storage, analysis and treatment planning and guidance and continues to develop the LegPERFECT® preoperative planning program and a universal knowledge base of the hospital's Ilizarov patients. *Medical degree from Novosibirsk State Medical School, Russia

The Division of Clinical Applications and Training, directed by Dr. David Podeszwa. The division allows for efficient collaboration between the center's research and clinical staff, manages all retrospective and prospective Ilizarov clinical studies and supervises all clinical training on distraction osteogenesis techniques and external skeletal fixation.

Computerized Preoperative Planning

During the course of their fellowship, TSRHC fellows have the opportunity to become familiar with computerized-preoperative planning for Ilizarov deformity correction. The center holds an annual deformity correction course during which fellows receive a full day of training in using TSRHC's copyrighted LegPERFECT® software for tibial and femoral deformity correction.

Experts in the field of Ilizarov deformity correction and computerized preoperative planning teach fellows the different ways to input data, create full-sized "blueprints" used for preoperative frame assembly and locate deviations from preoperative planning and make necessary adjustments.

**Priddy,
age 2, of Granbury**

Treatment for clubfoot can last years to make sure correction is achieved, but the end result is always worth it. Priddy didn't only gain a love of popcorn, wagon rides and stickers, but stong feet for her whole life.



Center for Excellence in Clubfoot Research



TSRHC patient Arthur, age 5 months, of Dallas, and Dr. Steve Richards, director of the Center for Excellence in Clubfoot Research

TSRHC treats more than 100 new patients with clubfeet each year and has more than 1,000 clubfoot-related clinic visits annually. In 2007, the hospital established a new research center, the Center for Excellence in Clubfoot Research, which is dedicated to the study of this disorder. Directed by Dr. Steve Richards, TSRHC chief medical officer, the center facilitates extensive research into clubfoot — its cause, the effectiveness of nonoperative and operative treatments and the study of gait patterns in clubfoot patients.

TSRHC is the leader among a small number of facilities in the nation that provide two nonoperative treatment methods for patients with clubfeet, the Ponseti casting method and the French physical therapy method of stretching, massaging and taping. These methods have been shown to be very effective and are most successful if the treatment begins early in the newborn period. In the event that complete correction of the foot cannot be achieved or maintained by these methods, surgery remains an effective option.

Physicians at TSRHC have been studying the effectiveness of each nonoperative method and comparing the results with patients who have undergone surgery.



Results of these studies have been published in the *Journal of Pediatric Orthopaedics* and *The Journal of Bone and Joint Surgery*, as well as presented at national and international conferences.

TSRHC researchers also have the opportunity to collaborate with bioengineers, the Movement Science Lab, molecular geneticists, orthotists and other experts in the field. TSRHC geneticists and geneticists at Washington University and the University of Houston, using DNA material collected from patients, are investigating genes associated with clubfeet. The Movement Science Lab at TSRHC has done extensive research on clubfeet, providing an objective measurement of patients' strength, joint range of motion and gait patterns following treatment. The Orthotics department works consistently with researchers to develop improvements to the brace used in the Ponseti method in order to enhance compliance among patients and ultimately improve long-term outcomes. The Physical Therapy department is performing functional testing on study participants to evaluate the effects of treatment.



TSRHC patient Lea, age 2 months, of Dallas, with therapist Hun Epps

**Emmitt,
age 6 months,
of Stephenville**

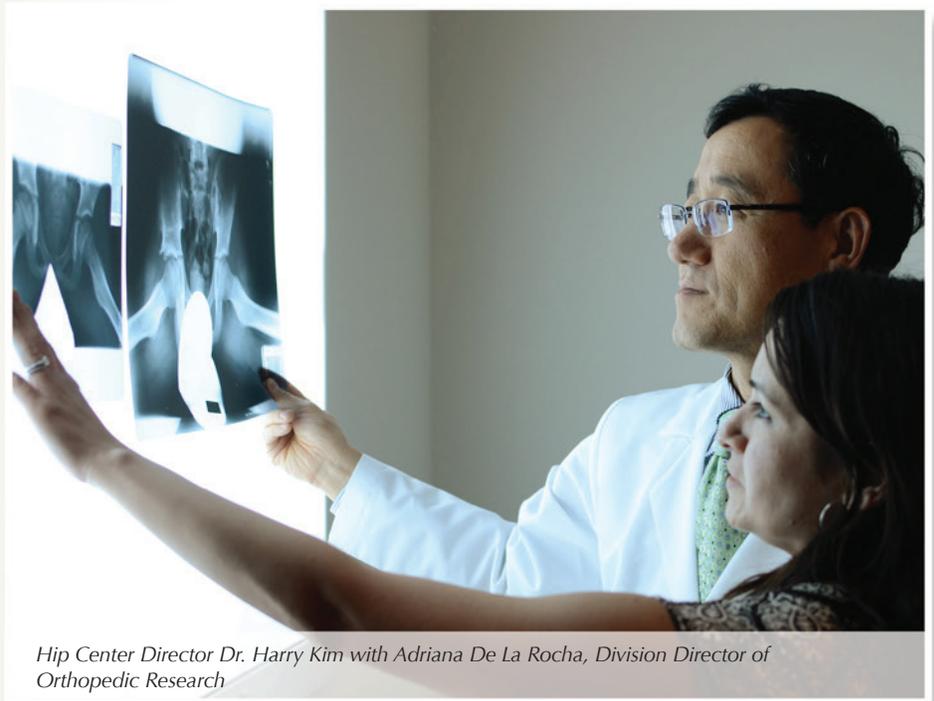
Getting placed in traction can seem like a tough thing for a little kid, but Emmitt took to his traction right away, learning to roll over, play and twist all while helping his hips.



Center for Excellence in Hip Disorders

TSRHC has a long tradition of providing the highest quality medical care to thousands of Texas children with various hip conditions. Our physicians are experts not only in diverse treatment options but also in day-to-day improvement of care, as well as groundbreaking research to find the causes and cures of these conditions.

Given the extensive expertise of our medical staff in hip disorder treatment, the significant strides made in our research efforts and the arrival of Dr. Harry Kim, Legg-Perthes expert and director of the Sarah M. and Charles E. Seay Center for Musculoskeletal Research at TSRHC, the hospital established the Center for Excellence in Hip Disorders.



Hip Center Director Dr. Harry Kim with Adriana De La Rocha, Division Director of Orthopedic Research

Hip Disorder Treatment and Research

Many of the hospital's studies and treatments have led to revolutionary, life-changing results. One such study of Legg-Calvé-Perthes, a condition in which a child's hip joint is abnormal and the blood supply to the head of the thighbone is temporarily stopped, began in the 1980s under the leadership of TSRHC Chief of Staff Emeritus Dr. Tony Herring.

The results were published in *The Journal of Bone and Joint Surgery* and form the basis of treatment at the hospital, most centers in North America and the world.

Dr. Herring continues his Legg-Perthes research with a study addressing long-term outcomes of patients now in their 20s. The center also continues to evaluate methods of diagnosis and treatment, including the use of MRI techniques in determining the progression and outcome of Legg-Perthes. In 2009, under the direction of Dr. Kim, TSRHC embarked upon a study into the progression of Legg-Perthes and other hip conditions. The study will provide important insight into the molecular mechanisms involved in the repair process following bone injury and will lead to the development of new treatment methods.

Several other hip disorders are frequently treated by TSRHC orthopedists, including developmental dysplasia of the hip and slipped capital femoral epiphysis. Five research studies in these areas are active. The center's work will allow the hospital to train hundreds of physicians in the best techniques and up-to-date methods, as well as offer innovative treatments and continually improve care for patients treated at TSRHC and throughout the world.



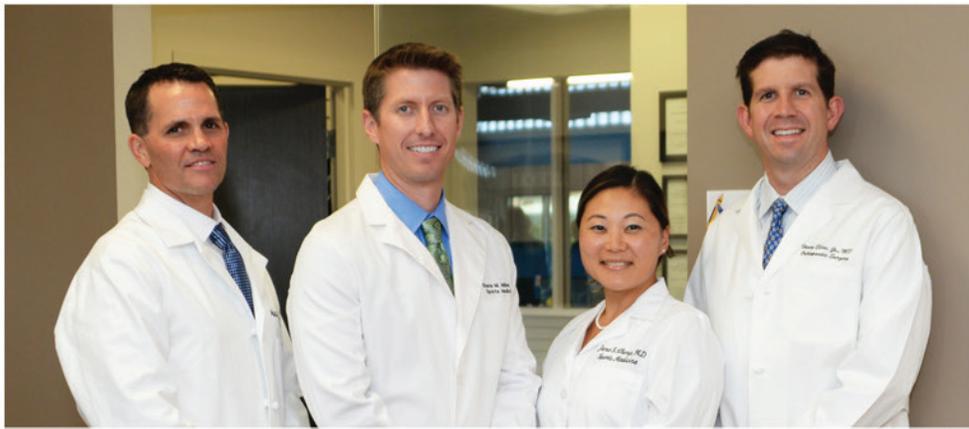
Top: Dr. Henry Ellis (left), Dr. Harry Kim, Chief of Staff Dr. Daniel J. Sucato, Chief of Staff Emeritus Dr. Tony Herring and Dr. David Podeszwa; TSRHC patient Rennah, age 2, of Sachse, with Advanced Practice Provider Erica Zepeda.

**Diego,
age 11, of Plano**

*Sidelined by an ACL tear
and reconstruction at age
10, Diego is working hard
to get back on the soccer
field.*



Center for Excellence in Sports Medicine



Drs. Philip Wilson, Shane Miller, Jane Chung and Henry Ellis

The Center for Excellence in Sports Medicine is focused on research and treatment of sports-related conditions in children and adolescents. Led by TSRHC Assistant Chief of Staff Dr. Philip Wilson, program director, the center offers both operative and nonoperative treatment options including advanced arthroscopic surgery.

Comprehensive care for the young athlete is provided by two pediatric orthopedic sports surgeons, two pediatric sports medicine physicians, advanced practice providers, psychologists, athletic trainers and physical therapists. One of the busiest in the country, the practice sees more than 6,500 clinic patients and performs more than 700 surgeries per year. Common conditions seen in growing athletes include shoulder instability, osteochondritis dissecans, femoral acetabular impingement, patellar instability, knee ligament reconstruction and sports concussions.

As founding members of the Pediatric Research in Sports Medicine Society (PRISM), our team is committed to research in diagnosis, treatment and prevention of sports injuries and conditions in children and adolescents. Current projects include descriptive anatomy, retrospective analysis of pathologies and treatment outcomes, cohort registries and prospective treatment studies. The TSRHC bioengineering team, biostatisticians, orthotists and motion analysis team are valuable resources. Our providers are members of regional and national study groups on a variety of sports medicine topics including Research in OsteoChondritis Dissecans of the Knee (ROCK).

Rotation at the center affords the future specialist familiarity with clinical examination and diagnostic evaluation of upper and lower extremity peri-articular injuries, ligamentous injuries and cartilage issues in the skeletally immature and youth athlete. In addition, trainees gain exposure to pediatric sports pathology in cadaveric sessions, the sports therapy gym and on the sidelines of youth sporting events. Additionally, trainees participate in sports medicine lectures, weekly operative planning and review conferences and multi-disciplinary pediatric sports journal club. Abundant opportunities to conduct clinical research studies are available.



Above from top: Staff Physician Dr. Shane Miller; Staff Physician Dr. Jane Chung and patient Baylee, age 15, of Lewisville; Pediatric Orthopedic Surgeons Drs. Henry Ellis and Philip Wilson

**Jordan,
age 7, of Sachse**

A superstar in every sense, Jordan is as active as they come. With the help of the Hand Center, Jordan's hand dexterity has been improved to help him reach all of his goals.



Charles E. Seay, Jr., Hand Center



Drs. Christopher Stutz and Scott Oishi

TSRHC's Charles E. Seay, Jr. Hand Center, directed by Dr. Scott Oishi, has provided exceptional care for children with congenital and acquired hand and upper limb deficiencies for more than 20 years. As the first pediatric orthopedic hospital to

employ full-time hand surgeons, TSRHC has the ability to treat an extraordinary number of children, including those with rare and complicated conditions that most physicians would rarely see. The Hand Center treats children with the entire spectrum of upper limb problems, including reconstruction of complex trauma and infections, neurologic conditions and congenital upper limb abnormalities.

Through the latest advancements in surgery and technology, the Hand team continues to improve the quality of care for TSRHC patients and enhance its international recognition as a leader in education and research.

The Hand Center combines a variety of disciplines, including psychological counseling, hand therapy and surgery, to provide patients with care that focuses on the whole child. This approach allows the hospital to not only treat patients' physical conditions but also to build the confidence they need to overcome challenges and realize their potential.

TSRHC's hand surgeons publish their work in peer-reviewed journals and participate in study groups and collaborative projects with physicians at pediatric hospitals around the world. The Hand Center has trained many hand surgeons who now practice throughout the country and globe, providing valuable care for children with hand and upper limb disorders.

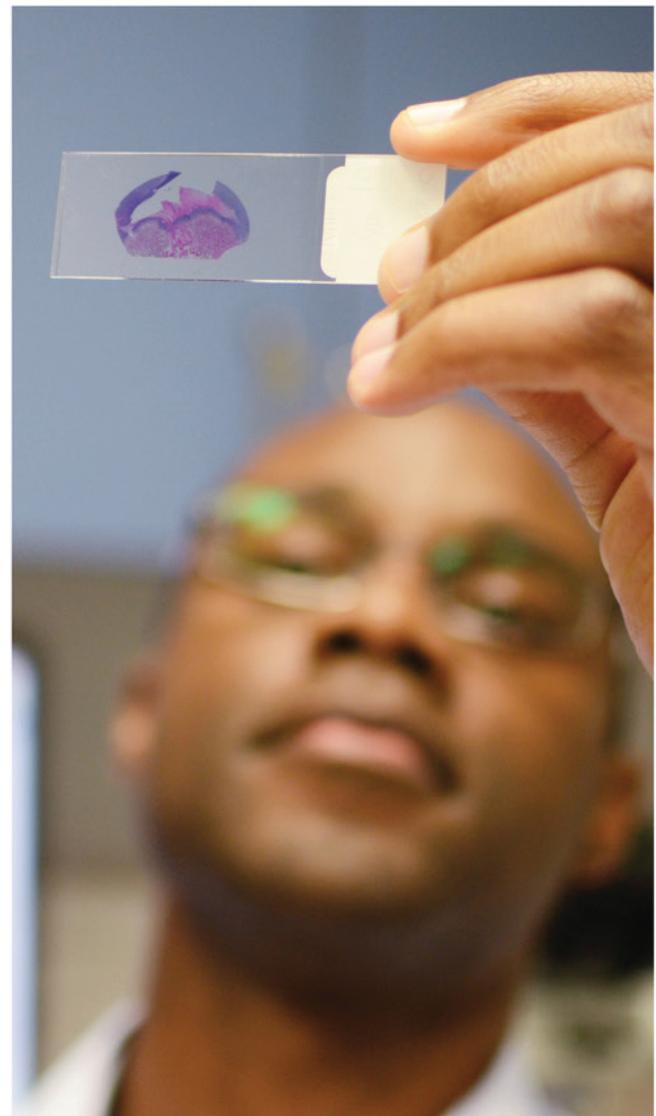
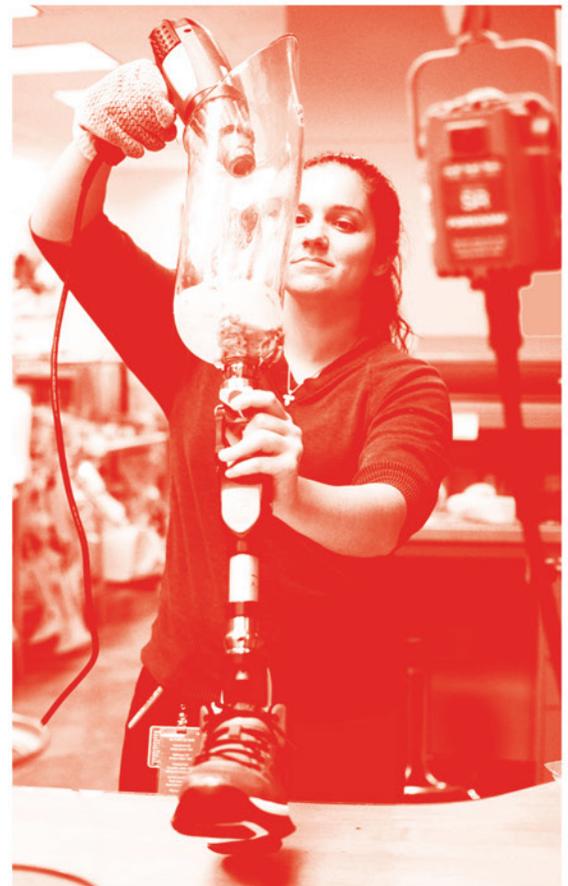
The center is affiliated with a number of fellowships in hand surgery. In addition, TSRHC offers a six-month pediatric hand and upper limb fellowship to appropriately trained hand or pediatric orthopedic surgeons. Orthopedic fellows are welcome to rotate with the hand service, participating in hand clinics and in the operating rooms.



Above from top: Dr. Scott Oishi; Patient Adi, age 6 months, of Grand Prairie, with Dr. Christopher Stutz

Planning for the Future

Innovation and expert care happens every day at Texas Scottish Rite Hospital for Children



Sarah M. and Charles E. Seay Center for Musculoskeletal Research



Dr. Harry Kim with Karen Standfer, researcher

The Sarah M. and Charles E. Seay Center for Musculoskeletal Research is an integral component of the orthopedic program at TSRHC. It is made up of several core divisions focused on basic science research and six centers for excellence specializing in research and patient care.

The Research department boasts a unique environment that encourages and supports collaboration between researchers and physicians, allowing the hospital to make innovative discoveries that have a significant impact on the lives of children.

Each fellow is required to complete a minimum of one research project during the year, but the opportunity to work on multiple projects is also available. Fellows have access to all research facilities at TSRHC.

A major strength of the hospital's research program is that ideas can be reviewed and approved quickly, allowing researchers to start working on a project almost immediately. The Research Advisory Panel reviews proposals every month.

Research projects that include human participants are reviewed by the Institutional Review Board at UT Southwestern Medical Center, with research coordinators at TSRHC helping fellows complete the required paperwork.

The center also provides a biostatistician to help fellows with project planning and statistical analysis of data so that each project has a defensible result. It includes three bioengineers who can assist fellows with the design, modification and mechanical testing of devices. Laboratory facilities are also available for the fellows' use at UT Southwestern Medical Center.



Adriana De La Rocha, Division Director of Orthopedic Research

Molecular Genetics Research



Dr. Carol Wise, director of Molecular Genetics and Basic Research in the research lab. Two more genes associated with Idiopathic Scoliosis have recently been identified in Dr. Wise's lab.

The TSRHC Division of Molecular Genetics Research, led by director Dr. Carol Wise, is discovering the genetic mechanisms that cause childhood musculoskeletal diseases.

Genetics of Idiopathic Scoliosis

By studying large patient populations, Dr. Wise, Chief of Staff Emeritus Dr. Tony Herring, the Molecular Genetics team, the Sarah M. and Charles E. Seay/Martha and Pat Beard Center for Excellence in Spine Research and other collaborators have identified genetic factors that increase the risk of a child developing adolescent idiopathic scoliosis (AIS), the most common spinal deformity in children. With no known cause or cure, the condition poses a significant health burden as it affects approximately 2 to 3 percent of school-age children in the U.S. and costs several billion dollars in surgical treatment each year. AIS mostly affects girls, for reasons that have been poorly understood.

Dr. Wise and her team were the first to report genome-wide studies of AIS and have identified several genetic factors that increase the risk of developing the condition. More recently the team defined a new genetic factor for AIS in females, providing the first insights into sex bias in the disorder. Ongoing work centers on continued discovery and defining the functional consequences of these risk factors. These discoveries have been funded by the Eunice Kennedy Shriver National Institute of Child Health and Human Development, the Scoliosis Research Society and other agencies. Dr. Wise also organized and co-chairs the International Consortium for Scoliosis Genetics, a group committed to collaborative studies of the genetics of scoliosis.

Genetics of Clubfoot

Clubfoot is a common foot deformity in children, and we are currently conducting large-scale population association studies to identify genetic risk factors associated with clubfoot. Our study includes collaborators at Washington University in St. Louis, the UT Health Science Center at Houston and the University of Otago in New Zealand.

Genomics of Orthopedic Disease: The G.O.O.D. for Kids Program

The G.O.O.D. for Kids program uses state-of-the-art research methods to discover genetic causes of pediatric musculoskeletal disorders through close collaboration between the Division of Molecular Genetics and TSRHC physicians. The G.O.O.D. for Kids program includes patients with numerous orthopedic conditions treated by TSRHC physicians and involves collaborators worldwide.

Macroductyly and other PROS

In collaboration with Dr. Marybeth Ezaki and members of the Charles E. Seay, Jr., Hand Center, Dr. Jonathan Rios identified the first genetic cause of Type 1 Macroductyly. Drs. Rios and Ezaki are working with other researchers in the field to develop diagnostic criteria for macroductyly and other PIK3CA-Related Overgrowth Syndromes (PROS), including muscle hemihypertrophy and CLOVES.

Disorders of Long Bone Growth and Development

Dr. Rios and the Molecular Genetics team recently defined the genetic basis of NF1-related congenital pseudoarthrosis of the tibia (CPT). Currently, the team is working to define the genetic and molecular mechanisms of bone growth and fracture healing, as well as to understand how the mechanisms may be used to improve bone quality and healing after fracture. The goal of this study is to identify new therapies to improve fracture healing and to improve bone quality in patients with progressive bone weakening.



T. Boone Pickens presented awards to TSRHC fellows recognizing their outstanding research. Left to right: Dr. Dan Sucato, chief of staff; Drs. Philip McClure and Rachel Thompson, 2016 fellows; T. Boone Pickens; Drs. Elizabeth Hubbard, Connor Green and Shawn Funk, 2016 fellows; and Dr. Tony Herring, chief of staff emeritus.

Tachdjian's Pediatric Orthopaedics: From the Texas Scottish Rite Hospital for Children

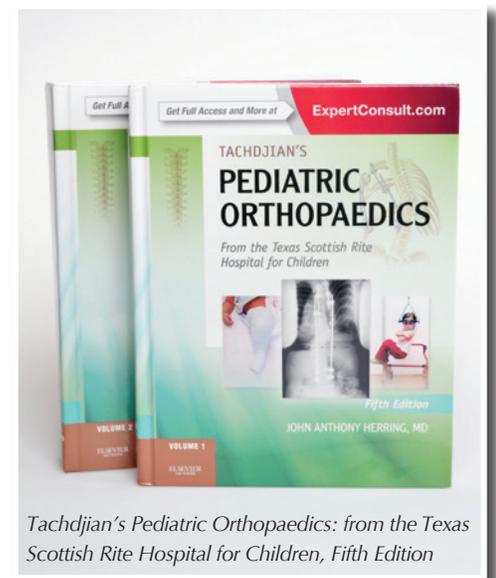


Left to right: Tachdjian's co-authors Drs. Harry Kim, Anthony Riccio, John Birch, Lane Wimberly, Alex Cherkashin, Lori Karol, Mikhail Samchukov, Tony Herring, David Podeszwa, Dan Sucato, Lawson Copley, Steve Richards, Karl Rathjen, Christine Ho, Phil Wilson, Brandon Ramo, Charles Johnston and Henry Ellis

Tachdjian's Pediatric Orthopaedics is considered the definitive text for pediatric orthopedic surgeons worldwide. Since the mid-1990s, TSRHC physicians have taken on the monumental task of writing new editions of the renowned reference book. "The wealth of knowledge and experience of the doctors at TSRHC was unsurpassed, making them the obvious choice," said Richard Lampert, an editor at the publishing company Harcourt Health Sciences.

Led by Chief of Staff Emeritus Dr. Tony Herring, physicians from the hospital have now completed the fifth edition, which includes 24 instructional videos featuring surgical instruction for a variety of cases. Regarded as the international standard and an essential tool for pediatric orthopedists, the three-volume set – two paper volumes and a third available with the others online – establishes the benchmark for the diagnosis and treatment, including surgery, of orthopedic conditions in children.

Tachdjian's Pediatric Orthopaedics: From the Texas Scottish Rite Hospital for Children incorporates the latest understandings and techniques in the field. It includes expanded information about trauma, with new clinical materials drawn from the contributors' extensive database. Chapters explore gait analysis, imaging studies and general principles of orthopedic injuries.



Tachdjian's Pediatric Orthopaedics: from the Texas Scottish Rite Hospital for Children, Fifth Edition

Movement Science Laboratory

A division of the Research department, the David and Ruth Tacke Movement Science Laboratory focuses on functional evaluation of patients with pathologies of the musculoskeletal system. The laboratory was established in 2000, thanks to a generous donation from David Tacke, in memory of his wife, Ruth. It is a state-of-the-art resource used for both clinical work and research.

Evaluations are conducted using equipment that can measure joint motion, net joint forces, muscle activity, strength, foot plantar pressures and oxygen consumption. The lab's clinical service provides clinicians with critical and objective analysis of a patient's gait or movement pathology. The lab is used in research to study the outcome of different surgical procedures, to compare different patient populations and to evaluate the effects of treatment intervention, such as prosthetic and orthotic prescriptions.

The lab's staff is made up of a multidisciplinary team of engineers and biomechanists led by Medical Director Lori Karol, M.D., and Director Kirsten Tulchin-Francis, Ph.D. TSRHC's orthopedic fellows play a crucial role in supporting the hospital's clinical and research efforts.

Current research projects include:

- Outcome studies of surgical procedures in children with cerebral palsy.
- Evaluation of the pathological hip.
- Development of improved techniques for modeling the musculoskeletal system.
- Outcomes of nonsurgical and surgical treatment of clubfoot deformity.
- Gait analysis, strength and energy efficiency in children with limb deficiencies.



Above: Movement Science Lab Researchers Kelly Jeans and Anthony Anderson guide a patient during her BioDex analysis; Patient Cesar, age 9, of Prosper





Researcher Dr. Hong "Johnny" Zhang

Fellows have a variety of opportunities in all areas of orthopedics, including spine, hip, trauma, limb lengthening, sports medicine and clubfoot deformity. The clinical research team assists fellows with patient recruitment, data collection and data analysis. Scientific presentations are made each year at national and international societies, including the Pediatric Orthopaedic Society of North America, the Scoliosis Research Society, the American Academy of Orthopaedic Surgeons and the International Limb Lengthening and Reconstruction Society. The findings and results from these projects are also published in journals such as *The Journal of Bone and Joint Surgery*, *Spine*, and the *Journal of Pediatric Orthopaedics*. Fellows make significant contributions to this legacy.

Fellows have the opportunity to work on several ongoing spine research projects, including:

- Developing instrumentation to perform tethering of the spine without fusion to correct scoliosis.
- Developing other fusionless techniques to correct scoliosis.
- Evaluating various biological developments to enhance fusion.
- Understanding intrathoracic and extrathoracic scar formation.
- Further developing the clinical database of patients treated for spinal deformity.

Clubfoot Deformity Research and Databases

Since 2001, a prospective clubfoot study has been underway at TSRHC to assess the effectiveness of two nonoperative methods: the Ponseti casting technique and the French physical therapy method of daily stretching, massaging and taping. In addition, DNA samples have been obtained from a large number of patients and families as the hospital investigates genetic aspects of the disorder.

All study patients, consisting of infants less than 3 months of age when treatment begins, are initially evaluated for the severity of their clubfoot deformity using the Dimeglio scale. TSRHC research indicates that rating the feet before treatment starts allows physicians to give patient families some indication of the expected success. The success rate of nonoperative treatment is now approaching 75 percent. An additional 10 to 12 percent of patients will require limited surgery. The results of the functional outcomes of patients with clubfoot deformity have been presented at various society meetings including the Pediatric Orthopaedic Society of North America.

Hip Research and Databases

TSRHC is a leader in the study of hip pathology and deformity, giving fellows the opportunity to work on various clinical hip research projects. One of the newest emerging fields is hip preservation surgery. At TSRHC, fellows can review the prospective database, including clinical, radiographic and gait/functional data and outcomes for this adolescent patient population. TSRHC also leads efforts in clinical research of developmental dysplasia of the hip. The establishment of a prospective database allows fellows to review demographic, clinical and long-term follow-up information of infants with hip dysplasia.

Research studies have been presented annually at the American Academy of Orthopaedic Surgeons and the Pediatric Orthopaedic Society of North America and have been published in various academic journals, including *The Journal of Bone and Joint Surgery*, *Clinical Orthopaedics and Related Research* and the *Journal of Pediatric Orthopaedics*.

Scoliosis Research and Databases

A strong clinical and basic science research program in spinal deformity maintains TSRHC's leadership role in this field. These research endeavors have led to new ideas and concepts that have produced landmark papers shaping the manner in which spinal deformity is treated today. Ongoing spine projects include the development of instrumentation to perform tethering of the spine without fusion to correct scoliosis and other fusion-free techniques; improved screw and instrument design for anterior endoscopic instrumentation and fusion; evaluating biological developments to enhance fusion; and updating the TSRH® Spinal System and the TSRH® SILO™ 5.5 Spinal System.

The Comparative Orthopedic Surgical Lab allows the research team to perform the full spectrum of spine surgeries, including anterior and posterior instrumentation, and is equipped with thoracoscopic/endoscopic tools.

The clinical research databases of patients treated for spinal deformity are expansive, providing fellows with limitless potential for outstanding research. TSRHC has developed the Scoliosis Surgical Outcomes Database that provides a means to input clinical and patient reported outcomes data on all patients with spinal deformity, including those with adolescent and early onset scoliosis. The database enables multiple users from the hospital to participate in investigations in a timely and cost-effective manner and allows for the confidential management of data entry, tracking and reporting on an as-needed basis.

International Perthes Study Group

TSRHC is the lead coordinating center for the International Perthes Study Group, led by Dr. Harry Kim. The group consists of about 40 physicians from the U.S. and eight other countries. We currently have prospective studies for three age groups of patients, 6 to 8, 8 to 11 and over 11, in the early stages of Perthes disease. We are also investigating the prognostic value of pre-treatment perfusion MRI and evaluating the use of the PROMIS questionnaire to assess quality of life. Through these studies and more to come, our mission is to advance the knowledge of Perthes disease and to improve the treatment of patients affected by the disease.



From top: TSRHC patient in clubfoot casting procedure; Research coordinators, left to right, Fernanda Pinarte, Meaghan Wassel, Lesley Butler, Dong Tran, Terri Beckwith, Adriana de la Rocha, Rebecca Nelson, Jennifer Rodgers, Kiley Poppino.

Call & the TSRHC Community



2016 Fellow Jason Sawa, R.N. with Dr. Philip McClure

Orthopedic fellows share on-call coverage with hand fellows 24 hours a day on Fridays, Saturdays and Sundays, including holidays. Monday through Thursday nights, including holidays, both groups share coverage with orthopedic residents from UT Southwestern Medical Center. The fellows are primarily responsible for managing inpatients and rare emergencies.

While on call, fellows have use of a spacious and well-appointed one-bedroom apartment located on the top floor of the hospital. A fully equipped kitchen and private bathroom are included, and a large balcony overlooks neighboring Reverchon Park, with a view of the Dallas skyline.

Fellows also have use of the hospital's fitness center and the medical library. All meals from the TSRHC cafeteria are complimentary while on call, and significant others and children are welcome to stay with the on-call fellow in the hospital apartment.



Every aspect of the hospital was designed with the goal of creating a welcoming, child-friendly atmosphere. Allan Shivers Park, in front of the main entrance, welcomes patient families, staff, the community and friends with its bright colors. It provides a safe playground for children of all physical abilities.

Resources Available to Fellows

At TSRHC, fellows have the support of a world-class staff and access to state-of-the-art equipment, information and personnel, including:

- **The Brandon Carrell, M.D., Medical Library**, an in-depth print collection of specialized books and journals as well as databases and online journals accessible through the hospital's Intranet.
- **Advanced Practice Professionals**, who provide valuable support within the clinic setting and on research projects. They conduct initial history and physical assessments on new patients, routine follow-up assessments on returning patients, order and review diagnostic studies and X-rays, diagnose and develop treatment plans and educate patients and families.
- **Dimension 3D Printer**, which creates invaluable models for studying patients before surgery. Physicians can learn almost the exact nature of the physical condition affecting the patient.
- **Fuji Synapse Picture Archiving and Communication System**, used by the Radiology department to assist physicians in preoperative planning in their offices and clinics and via computer in conferences. Images can be saved to PowerPoint presentations and data can be accessed for publication.
- **Siemens MedSeries4 Clinical Suite**, an enterprise-wide system for the administration of automated health records. Siemens enables physicians and staff to communicate important information to enhance patient safety initiatives. The integrated system addresses daily clinical processes for licensed professionals by eliminating redundant activities and enabling coordination of work, such as documentation.
- **Cross-Sectional Imaging** through the use of a General Electric 16-channel 1.5 Tesla MRI scanner and an American College of Radiology accredited Philips 64-slice CT scanner. These systems acquire and reconstruct high quality, detailed studies of patients, providing the clinical staff and fellows with necessary pretreatment/preoperative information about children with congenital, developmental and acquired musculoskeletal abnormalities.
- **Clinical Support Staff** in each clinic, including a registered nurse coordinator, a licensed vocational nurse and a clerk technician. The RN coordinator is responsible for working with the orthopedic surgeon to manage the patient population and is responsible for patient-family education, scheduling of admissions and surgical procedures, and assessing walk-in patients. The coordinator and the LVN attend each clinic, facilitate physician orders and assist with treatments and procedures. The clerk technician manages patient flow, assists with ordering X-rays and labs and screens patients for immunization status and allergies.



Physician Assistant Jessica Frankle; Advanced Practice Nurses Hong Putnam, Erica Zepeida, Libby Powell, Shawne Faulks, Susan Dale, Andrea Stick and Roni Stern

2016 Fellow
Dr. Connor Green

Social Events and Opportunities



During their fellowship, TSRHC fellows become important members of the hospital's family and often form strong bonds with one another.

Fellows and their families are invited to participate in a variety of social activities throughout the year. Some events include a holiday luncheon honoring TSRHC fellows, the annual TSRHC picnic, the Dallas Marathon relay race, the Rocker b Ranch trip and soccer games hosted by Dr. John Birch. The orthopedic staff hosts a goodbye dinner each July in honor of the fellows during which the staff pays tribute to each fellow.



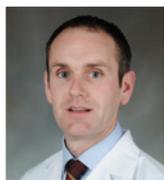
Current and Future Fellows

2015–2016 TSRHC Fellows



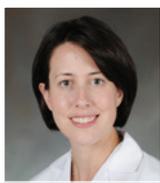
Shawn Funk, M.D.

Dr. Funk received a B.S. degree in Mechanical Engineering at Brigham Young University in Provo, Utah. He then earned a Medical degree at University of Texas Medical School at Houston in Houston, Texas. Dr. Funk completed a residency in orthopedic surgery at Vanderbilt University in Nashville, Tenn.



Connor Green, M.D.

Dr. Green received his Medical and Master of Surgery degrees from University College in Dublin, Ireland. He then completed his residency at the Royal College of Surgeons in Ireland. He completed his first fellowship at the Rubin Institute for Advanced Orthopedics in Baltimore, Md.



Elizabeth Hubbard, M.D.

Dr. Hubbard received a B.A. degree in Biology at Siena College in Loudonville, New York. She then earned a Medical degree at Albany Medical College, Albany, NY and completed a residency in orthopedic surgery at Duke University Medical Center in Durham, N.C.



Philip McClure, M.D.

Dr. McClure received a B.S. degree in Applied Physics with Honors at Brigham Young University. He then earned his Medical degree at the University of Pittsburgh- Medical School in Pittsburgh, Pennsylvania. He completed a residency in orthopedic surgery at the Warren Alpert Medical School of Brown University- Rhode Island Hospital.



Rachel Thompson, M.D.

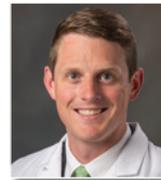
Dr. Thompson received a B.A. in Political Science and her Medical degree at George Washington University in Washington, DC. She completed her residency in orthopedic surgery at Northwestern University- McGaw Medical Center in Chicago, Ill.

2016–2017 TSRHC Fellows



Philip Ashley, M.D.

Dr. Ashley received a B.S. degree in Physics at Harding University in Searcy, Arkansas. He then earned a Medical degree at University of Texas Medical Branch at Galveston in Galveston, Texas. Dr. Ashley is now completing a residency in orthopedic surgery at the University of Kentucky in Lexington, Ky.



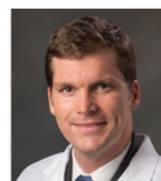
Daniel Bouton, M.D.

Dr. Bouton received a B.A. degree in Chemistry at Washington University- St. Louis in St. Louis, Missouri. He then earned a Medical degree from Drexel University- College of Medicine in Philadelphia, Pennsylvania. Dr. Bouton is currently completing a residency in orthopedic surgery at Akron General Medical Center in Akron, Ohio.



Andrew Tice, M.D.

Dr. Tice received a B.Sc. degree in Kinesiology and minored in Biochemistry at McMaster University in Hamilton, Ontario, Canada. He then earned a Medical degree from the University of Alberta in Edmonton, Alberta, Canada. Dr. Tice is currently completing a residency in orthopedic surgery at the University of Ottawa in Ottawa, Ontario, Canada.



John Vorhies, M.D.

Dr. Vorhies received a B.A. in Chemistry/ Geochemistry from Pomona College in Claremont, California. He then earned a Medical degree from Stanford University- School of Medicine. Dr. Vorhies is currently completing a residency in orthopedic surgery at Stanford Hospital and Clinics in Stanford, Calif.



Stephan Zmugg, M.D.

Dr. Zmugg received a B.A. degree in Molecular and Cellular Biology from University of California- Berkeley in Berkeley, California. He then earned his Medical degree from Tufts University School of Medicine in Boston, Massachusetts. Dr. Zmugg is currently completing a residency in orthopedic surgery at the Northwestern University –Feinberg School of Medicine in Chicago, Ill.

2017–2018 TSRHC Fellows



Ian Corcoran-Schwartz, M.D.

Dr. Corcoran-Schwartz received a B.S. degree in Biomedical Engineering and a minor in Entrepreneurship and Management at Johns Hopkins University in Baltimore, Maryland. He then earned a Medical degree at Stanford University School of Medicine in Palo Alto, California. Dr. Corcoran-Schwartz is now completing a residency in orthopedic surgery at Stanford Hospital and Clinics.



Lorena Floccari, M.D.

Dr. Floccari received a B.S. degree at Saint Louis University in St. Louis, Missouri. She then earned a Medical degree from The Ohio State University College of Medicine in Columbus, Ohio. Dr. Floccari is currently completing a residency in orthopedic surgery at the Mayo Clinic in Rochester, Minnesota.



Dustin Greenhill, M.D.

Dr. Greenhill received a B.S. degree in Mathematical Science and Civil Engineering from West Point-United States Military Academy in West Point, New York. He then served in the US Army for four years. Once he completed his service, he earned his Medical degree in 2012 and is currently completing his orthopedic residency from Temple University School of Medicine in Philadelphia, Pennsylvania.



Surya Mundluru, M.D.

Dr. Mundluru received a Bachelors of Liberal Arts and Medical Degrees from the University of Missouri at Kansas City through their six year Integrated MD/BA dual degree program in Kansas City, Missouri. He then completed a Combined Internal Medicine and Pediatrics Training Program with Children's Hospital of Philadelphia in Philadelphia, Pennsylvania. Dr. Mundluru is currently completing a residency in orthopedic surgery at New York University Langone Medical Center Hospital for Joint Diseases in New York, New York.



Jeffrey Peck, M.D.

Dr. Peck received a B.A. degree in Chemistry and a minor in Global Health from Northwestern University in Evanston, Illinois. He then earned his Medical degree from The Ohio State University College of Medicine in Columbus, Ohio. Dr. Peck is currently completing a residency in orthopedic surgery at McLaren-Flint/Michigan State University in Flint, Michigan.

Relocation to Dallas

We look forward to welcoming you to our family at TSRHC.

To assist in your transition, each fellow receives a \$2,500 moving allowance, mailed in June, to help with relocation costs. TSRHC staff is able to provide information about the Dallas/Fort Worth area, including real estate agents, neighborhoods and schools.

The administrative support staff assists the fellows with getting licensed to practice medicine in Texas. The house staff coordinator will also be available for assistance.

Once fellows are on board at TSRHC, the house staff coordinator will help orient new fellows to the hospital and be available to provide administrative support.



Dallas skyline with Texas Scottish Rite Hospital for Children in the foreground

Former TSRHC Fellows



The 36th Anniversary former fellows group

1978

Clyde Parsons, M.D. (Springfield, Mo.)
Roger Sobel, M.D. (Fort Collins, Colo.)

1979

Hanes Brindley, Jr., M.D. (Temple, Texas)
Thomas Ditkoff, M.D. (West Bloomfield, Mich.)
John Purvis, M.D. (Jackson, Miss.)

1980

O. Lee Henderson, M.D. (retired, Fayetteville, Ark.)
*James Roach, M.D. (Pittsburgh, Pa.)

1981

*John Birch, M.D. (TSRHC, Dallas, Texas)
*Charles Johnston, M.D. (TSRHC, Dallas, Texas)

1982

Walter Carlson, M.D. (Sioux Falls, S.D.)
*Robert Fitch, M.D. (Durham, N.C.)
John Houkom, M.D. (deceased)

1983

Louis Keppler, M.D. (Cleveland, Ohio)
*Elizabeth Szalay, M.D. (deceased)
*Timothy Ward, M.D. (Pittsburgh, Pa.)

1984

*Jay Jarvis, M.D. (Ottawa, Ontario, Canada)
Wayne Johnson, M.D. (Portsmouth, Va.)
Carol Mowery, M.D. (Seattle, Wash.)

1985

*Paul Caskey, M.D. (Spokane, Wash.)
Curtis Gruel, M.D. (retired, Edmond, Okla.)
*Randall Loder, M.D. (Indianapolis, Ind.)
John Ritterbusch, M.D. (Sheridan, Wyo.)

1986

*Jeffrey Ackman, M.D. (Chicago, Ill.)
*Anne Dzus, M.D.
(Saskatoon, Saskatchewan, Canada)
*Robert Galpin, M.D. (Buffalo, N.Y.)
*B. Stephens Richards, M.D.
(TSRHC, Dallas, Texas)

1987

Jonathan Camp, M.D. (Las Vegas, Nev.)
Robert Caudle, M.D. (Clayton, N.C.)
Donna Phillips, M.D. (New York, N.Y.)

1988

*John Blanco, M.D. (New York, N.Y.)
Mark Dales, M.D. (Seattle, Wash.)
*William Schrader, M.D. (Akron, Ohio)
Richard Shindell, M.D. (Phoenix, Ariz.)

1989

Matthew Bueche, M.D. (Naperville, Ill.)
*Jeffrey Neustadt, M.D. (St. Petersburg, Fla.)
*Jay Shapiro, M.D. (Austin, Texas)
William Shaughnessy, M.D. (Rochester, Minn.)

1990

*Joseph Gerardi, D.O. (Madera, Calif.)
*Lori Karol, M.D. (TSRHC, Dallas, Texas)
Mario Turi, M.D. (Greenville, Maine)
Suzanne Yandow, M.D. (Seattle, Wash.)

1991

*Jim Sanders, M.D. (Rochester, N.Y.)
*Kit Song, M.D. (Los Angeles, Calif.)
*Paul Urbanek, M.D. (Concord, N.H.)
John Williams, M.D. (Austin, Texas)

1992

*Thierry Benaroch, M.D.
(Montreal, Quebec, Canada)
*Frances Farley, M.D. (Ann Arbor, Mich.)
*Henry "Chip" Iwinski, M.D. (Lexington, Ky.)
*Eric Loveless, M.D. (Jacksonville, Fla.)

1993

*Tracy Ballock, M.D. (Cleveland, Ohio)
Jeffrey Hanway, M.D. (Washington, D.C.)
Anthony "Tony" Lapinsky, M.D.
(New Harford, N.Y.)
*Peter Newton, M.D. (San Diego, Calif.)
*J. Michael Wattenbarger, M.D. (Charlotte, N.C.)

1994

Susan Austin, M.D. (Cordova, Tenn.)
*Mark Erickson, M.D. (Aurora, Colo.)
Norman Ramirez, M.D.
(Mayaguez, Puerto Rico)
J. Brian Sims, M.D. (Amarillo, Texas)

1995

John Fox, M.D. (Shreveport, La.)
Todd Lincoln, M.D. (Oakland, Calif.)
Philip Mack, M.D. (Hartfield, Ct.)
*Chris Reilly, M.D. (Vancouver, British
Columbia, Canada)

1996

Lawson Copley, M.D. (TSRHC, Dallas, Texas)
David Schiffman, M.D. (Sacramento, Calif.)
Jeff Settecerri, M.D. (Royal Oak, Mich.)
*Ira Zaltz, M.D. (Royal Oak, Mich.)

1997

Joseph Bellflower, M.D. (Indianapolis, Ind.)
Prasad Gourineni, M.D. (Skokie, Ill.)
Albert Knuth, M.D. (Park Ridge, Ill.)
*Daniel J. Sucato, M.D., M.S.
(TSRHC, Dallas, Texas)

1998

*Joseph Davey, M.D. (Oklahoma City, Okla.)
Erik King, M.D. (Chicago, Ill.)
Scott Shoemaker, M.D. (San Diego, Calif.)
*Vishwas Talwalkar, M.D. (Lexington, Ky.)

*Holds Leadership Position



1999

David Konigsberg, M.D. (Midland Park, N.J.)
 Elizabeth Magnabosco, M.D.
 (San Antonio, Texas)
 Jean Ouellet, M.D. (Montreal, Quebec, Canada)

2000

Maurice Albright, M.D. (Boston, Mass.)
 Sharon Mayberry, M.D. (Birmingham, Ala.)
 David Podeszwa, M.D. (TSRHC, Dallas, Texas)
 Nicholas Waanders, M.D., Ph.D.
 (Bangor, Maine)

2001

*Craig Ebersson, M.D. (Providence, R.I.)
 Michael Ferrick, M.D. (Buffalo, N.Y.)
 Carl St. Remy, M.D. (Norfolk, Va.)
 J. Channing Tassone, M.D. (Milwaukee, Wis.)

2002

Patrick Bosch, M.D. (Pittsburgh, Pa.)
 Jeffrey Cassidy, M.D. (Grand Rapids, Mich.)
 Kelly Mueller Vanderhave, M.D.
 (Charlotte, N.C.)
 *Anthony Scaduto, M.D. (Los Angeles, Calif.)

2003

Shannon McClure, M.D. (Washington, D.C.)
 *Todd Milbrandt, M.D. (Rochester, Minn.)
 Debra Popejoy, M.D. (Sacramento, Calif.)
 R. Lane Wimberly, M.D. (TSRHC, Dallas, Texas)

2004

Virginia Casey, M.D. (Charlotte, N.C.)
 *Ron El-Hawary, M.D.
 (Halifax, Nova Scotia, Canada)
 Brian Hasley, M.D. (Omaha, Neb.)
 Michael Wade Shrader, M.D. (Jackson, Miss.)

2005

David Gurd, M.D. (Cleveland, Ohio)
 Christine Ho, M.D. (TSRHC, Dallas, Texas)
 Anthony Riccio, M.D. (TSRHC, Dallas, Texas)
 Klane White, M.D. (Seattle, Wash.)

2006

John Lovejoy, III, M.D. (Orlando, Fla.)
 Jeff Martus, M.D. (Nashville, Tenn.)
 Amy McIntosh, M.D. (TSRHC, Dallas, Texas)
 *Bryan Tompkins, M.D. (Spokane, Wash.)

2007

Lauren Allen, M.D.
 (Saskatoon, Saskatchewan, Canada)
 Derek Kelly, M.D. (Germantown, Tenn.)
 Mark Lee, M.D. (Hartford, Conn.)
 Joshua Meier, M.D. (Louisville, Ky.)
 Kristina Walick, M.D. (Fort Carson, Colo.)

2008

Stephen Adolfsen, M.D. (East Brunswick, N.J.)
 Lucas Murnaghan, M.D.
 (Toronto, Ontario, Canada)
 *Matthew Oetgen, M.D. (Washington, D.C.)
 Neil Saran, M.D. (Montreal, Quebec, Canada)
 Suzanne Steinman, M.D. (Seattle, Wash.)

2009

Nicholas Fletcher, M.D. (Atlanta, Ga.)
 Sumeet Garg, M.D. (Aurora, Colo.)
 Michael Kwon, M.D. (Philadelphia, Pa.)
 A. Noelle Larson, M.D. (Rochester, Minn.)
 Jonathan Schiller, M.D. (Providence, R.I.)

2010

Jennifer C. Laine, M.D. (St. Paul, Minn.)
 Benjamin D. Martin, M.D. (Washington D.C.)
 Brandon A. Ramo, M.D. (TSRHC, Dallas, Texas)
 Jamie Rice Denning, M.D. (Cincinnati, Ohio)
 Alec C. Stall, M.D. (San Antonio, Texas)

2011

Terrence Anderson, M.D. (Houston, Texas)
 Vedant Kulkarni, M.D. (Sacramento, Calif.)
 Ryan Muchow, M.D. (Lexington, Ky.)
 Dominick Tuason, M.D. (East Brunswick, N.J.)
 Megan Young, M.D. (Washington, D.C.)

2012

Chukwudi Chukwuyere, M.D.
 (Montreal, Quebec, Canada)
 Rebecca Clinton, M.D. (Portland, Ore.)
 Corey Gill, M.D. (Dallas, Texas)
 Dana Olszewski, M.D. (Atlanta, Ga.)
 David Roberts, M.D. (Skokie, Ill.)

2013

Matthew Abbott, M.D. (Ann Arbor, Mich.)
 Benjamin Escott, M.D. (Milwaukee, Wis.)
 Janay McKie, M.D. (Shreveport, La.)
 Ryan Miller, M.D. (Mesa, Ariz.)
 Sarah Offley, M.D. (Gainesville, Fla.)

2014

Franklin Gettys, M.D. (Greenville, S.C.)
 Lauren LaMont, M.D. (Fort Worth, Texas)
 Lise Leveille, M.D. (Vancouver, British
 Columbia, Canada)
 Megan Mignemi, M.D. (Nashville, Tenn.)
 Kevin Smit, M.D. (Ottawa, Ontario, Canada)

2015

Shawn Funk, M.D. (San Antonio, TX)
 Connor Green, F.R.C.S.I. (Dublin, Ireland)
 Elizabeth Hubbard, M.D. (Lexington, KY)
 Philip McClure, M.D. (Fellowship at Baltimore, MD)
 Rachel Thompson, M.D. (Santa Monica, CA)

Former Fellows Speak About TSRHC



"I consider my time at TSRHC as the most important of my career. First as a fellow, and later as staff, the experience was a continual process of improving one's understanding of pediatric orthopedic disease and developing one's surgical capabilities to treat incredibly difficult cases."

– James Roach, M.D., 1980-1981

"Without hesitation, I can say that the training during my fellowship year at TSRHC could not have been more valuable. Both the enthusiasm and knowledge I gained during my fellowship year has stayed with me, and I'm sure it will remain throughout my career."

– J. Channing Tassone, M.D., 2001-2002



"You will learn from the most talented group of pediatric orthopedic surgeons ever assembled. But the benefits of training at TSRHC do not end when you leave the hospital. I count the staff at TSRHC among some of my best friends. They are always willing to help me with career choices and difficult cases."

– Derek Kelly, M.D., 2007-2008

"Clinically the experience cannot be topped. Each clinic includes several cases forcing you to review the literature in order to educate yourself on very complex or rare orthopedic conditions. Operatively the caseload is full of disorders, which vary weekly to cover the whole spectrum of pediatric orthopedics."

– David Gurd, M.D., 2005-2006



"This fellowship teaches you how to care for the patient from initial presentation through the end of treatment. Just as important, however, is to learn how to create a happy and efficient working environment. I leave here with an excellent template from which I plan to model my future practice."

– Shannon McClure, M.D., 2003-2004

"There was never a single 'right' – or even 'Rite' – answer but a lively discussion of the many possible ways to approach a problem. At TSRHC, you don't just learn how to do pediatric orthopedics, you learn how to think about pediatric orthopedics."

– Sharon Mayberry, M.D., 2000-2001



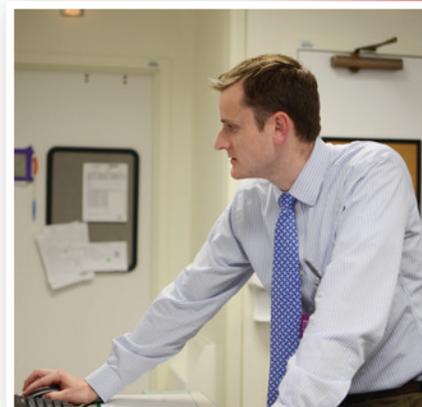
"My fellowship essentially launched my career in academic pediatric orthopedics. It allowed me to meet many people in the field and gave me a good selling point when looking for academic pediatric orthopedic positions. I don't think there is a better program."

– Randall Loder, M.D., 1985-1986

Calendar of Events 2016-2017

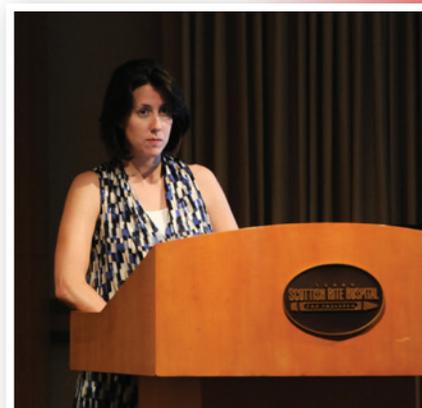
2016

PALS Training for New Orthopedic Fellows	July 25
New Fellow Orientation.....	July 25-31
New Fellow Orientation Breakfast	August 1
Scoliosis Research Society (Prague)	September 21-24
TSRHC Staff Picnic	September 25
Fall Spine Symposium.....	October 28
Bioskills Lab	November 11
Thanksgiving Holiday	November 24
Dallas Marathon	December 11
Fellows Holiday Luncheon	December 16
Staff Holiday Party	December 22
Christmas Holiday.....	December 23 & 26



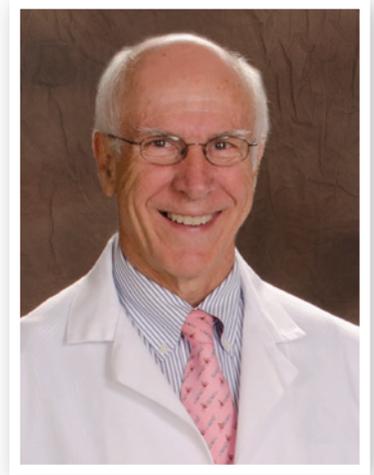
2017

New Year's Day Holiday.....	January 1
Bioskills Lab	March 3
AAOS Annual Meeting (San Diego, Calif.)	March 14-18
POSNA Annual Meeting (Barcelona)	May 3-6
Fellows' Trip to Rocker b Ranch	May
Brandon Carrell Visiting Professorship	June 23 & 24
Annual T. Boone Pickens Luncheon	June
Fellows' Farewell Dinner.....	July



From top: 2016 Fellow Dr. Shawn Funk; 2016 Fellow Dr. Rachel Thompson and Dr. Philip Wilson; 2016 Fellow Dr. Elizabeth Hubbard

A Message from Dr. Tony Herring, Chief of Staff Emeritus



Fellowship at Texas Scottish Rite Hospital for Children (TSRHC) is an extraordinary educational experience for individuals interested in careers in pediatric orthopedic surgery and spine deformity. Our comprehensive fellowship program has all of the components necessary to prepare fellows for productive clinical and academic careers. The first element is a patient population of great diversity, which presents continual challenges in decision making and surgical expertise. The second and most important component is a dedicated full-time team of 19 pediatric orthopedists and hand specialists staffing both TSRHC and the campuses of Children's Health.

First and foremost, the Fellowship in Pediatric Orthopedics and Scoliosis is a clinical program with in-depth training in all aspects of reconstructive pediatric orthopedics, trauma and infections. Our population of spinal deformity patients covers a wide spectrum, from moderate deformity requiring close observation and brace management, to severe deformity requiring complex surgical intervention. We employ state-of-the-art electrophysiologic monitoring, epidural pain control and other methods of excellent postoperative patient management. In addition, we have an outstanding Research department, as well as a Creative Services department that facilitates clinical and research activities.

Our fellows become a vital part of the TSRHC family. Our hospital staff has a unique bond derived from the caring attitude that accompanies helping children. The fellowship does not end after one year. Rather, it continues through frequent correspondence, meetings such as the Brandon Carrell Visiting Professorship, and receptions at the AAOS meeting, to name a few. If you choose TSRHC, you will receive a lifetime membership in a group strongly committed to children and to each other. We deeply respect and are committed to our fellows, past and present, and working together, we learn more each day about the ways that orthopedic surgery can positively impact the lives of children.



— DR. J. A. "TONY" HERRING,
Chief of Staff Emeritus

2016-2017
TSRHC fellows



Texas Scottish Rite Hospital for Children is one of the nation's leading pediatric centers for the treatment of orthopedic conditions and sports injuries, as well as certain related arthritic and neurological disorders and learning disorders, such as dyslexia. Patients receive treatment regardless of the family's ability to pay.

Online Application and Contact Information

Interested applicants may enter the match beginning September 2016. For more information, please contact the GME Manager or Phyllis Cuesta, the Administrative Director of Orthopedics at 214-559-7604 or 800-421-1121, ext. 7604 or by email at phyllis.cuesta@tsrh.org.



*Patient Alexis, age 6,
of Daingerfield*



T E X A S
SCOTTISH RITE HOSPITAL



Texas Scottish Rite Hospital for Children
2222 Welborn Street, Dallas, Texas 75219
214-559-5000 or 800-421-1121