INSIDESURGERY
Spring 2014

Texas Children's Hospital®

The Advanced Imaging Suite at Texas Children's Pavilion for Women gives a more complete picture

The new Texas Children's Hospital advanced imaging suite is home to some of the best radiological technology available for the pediatric population. The suite includes: three MRI scanners, both 1.5 and 3 Tesla, a PET MRI, a PET CT, three nuclear radiology imaging pieces including two Gamma cameras and a SPECT CT.

Located in the Texas Children's Pavilion for Women, this 10,000-square-foot imaging suite sees more than 10,000 patients a year and provides the resources for the radiology team to better visualize, diagnose and treat conditions from cancer to epilepsy to pneumonia to fractures.

Texas Children's is the first hospital in Houston and first freestanding children's hospital in the United States to have this advanced PET MRI technology. This new machine complements the PET CT scanner and is strategically placed in an adjacent room.

Dr. George S. Bisset, chief of pediatric radiology, and his team are currently working toward comparing and contrasting the results from both machines. If the PET MRI results are deemed similar to the PET CT scans, in the future we may be able to rely only on the MRI results and eliminate the need for CT scans, reducing patient radiation exposure by 40 percent.

"The PET MRI also offers the opportunity to combine physiologic information gleaned from the PET scan with anatomic information available from the MRI. This advanced scanning allows a more complete picture of a disease process," said Bisset.

"In the setting of cancer, hopefully, this technology will allow us to tailor treatment approaches, and perhaps change therapy if a tumor is unresponsive."

"These machines enhance the information available to the patient's team of doctors, including surgeons, and can lead to better treatment and surgical outcomes," added Bisset.

Additionally, a select few of the imaging suite rooms are outfitted with the Philips Ambient Experience. This tool serves as a distraction technique, creating a soothing, kid-friendly ambiance allowing the patient to select the lighting color, music and scenic or cartoon videos to be featured in the room during the exam. By creating a calm atmosphere and giving the patient the power to control at least one aspect of the procedure, Texas Children's is working toward the goal of completing exams without sedation to make imaging safer and easier for the patient and more cost-effective for the hospital.

The Philips technology footprint also extends into the waiting room where patients have access to a Kitten Scanner – a toy-like version of a CT or MRI scanner. This replica allows for pediatric patients to scan a toy and learn about how the scanner works and why the exam is needed. The patients are able to see the toy's "insides" and fully understand their upcoming procedure in a simplified, basic manner.

Texas Children's has radiology suites in nine Houston-area locations and can be reached at 832-TC4-XRAY or texaschildrens.org/refer/radiology.

A Message from the Surgeon-in-Chief

Dear colleagues,

Thank you for your continued interest in the Department of Surgery at Texas Children's Hospital. We are are excited to share with you many stories, updates and announcements.

In this edition, we are pleased to showcase our advanced imaging suite that is changing the radiological experience for our patients; a new same-day surgery consultation program that's already resulted in more than 400 same-day appointments per month since Sept. 2013; a review of the department's philanthropic efforts last year; and much more.

Respectfully,

Charles D. Fraser Jr., M.D.

Surgeon-in-Chief, Texas Children's Hospital

Donovan Chair and Chief of Congenital Heart Surgery, Texas Children's Hospital

Susan V. Clayton Chair in Surgery, Baylor College of Medicine

Professor of Surgery and Pediatrics, Baylor College of Medicine

Greater than the sum of our parts

2013 was an incredible year for philanthropy for the Department of Surgery. Through generosity, kindness and the gift of time, the Department of Surgery received donations of more than $6 million to support our mission of excellence in patient care, education, and research.

The hospital and its generous benefactors helped establish three new endowed chairs to benefit the Department of Surgery.

The S. Baron Hardy Endowed Chair in Plastic Surgery – a gift from the T.L.L. Temple Foundation, this endowment honors a true leader in pediatric plastic surgery - S. Baron Hardy, M.D. (1906-1990). Dr. Hardy was the Baylor College of Medicine chief of plastic surgery at the request of Dr. Michael E. DeBakey. Currently, Larry Hollier, M.D., chief of plastic surgery at Texas Children's Hospital and Baylor College of Medicine, holds the S. Baron Hardy Endowed Chair. The Hardy Chair funds will be used to facilitate expanding research and educational initiatives in plastic surgery at the hospital. A particular focus will be studying the emotional and psychological well-being of adolescent patients.

The Samuel Stal Endowed Chair in Plastic Surgery – established to honor the life of Samuel Stal, M.D., Texas Children's physician and Baylor College of Medicine professor for more than 30 years. Portions of this endowment will be used to recruit new physicians to the Department of Surgery.

The John L. Hern Foundation Endowed Chair in Transplant Surgery – Texas Children's Hospital helped establish the chair in memory of John L. Hern who was hospitalized for 252 days awaiting a heart transplant. Dr. John Alan Goss, medical director of transplantation will serve as inaugural appointee to this endowment. The funds will assist Dr. Goss in developing a transplant immunology program to help physicians understand the interactions between the transplanted patients and their new organs including infections that occur in the pediatric transplant patient.

Fraser's Friends, another philanthropic support group for the hospital led by Dr. Charles D. Fraser, Jr., surgeon-in-chief, furthers the surgical enterprise of Texas Children's. In 2013, Fraser's Friends raised more than $550,000, with much of the funding directed to the Urology department.

Many surgeons and surgery leadership renewed their commitment to the hospital's Ambassador program last year. Ambassadors are encouraged to both attend and host educational luncheons, social events, tours and more to share the hospital's story. Funds raised through last year's surgical Ambassadors helped assist with the purchase of a DaVinci® Si robot; establish a Surgery Multimedia team; host a department family event; and distribute awards at the annual Surgical Research Day event.

Overall, it takes the efforts of so many to make great advancements that will ultimately benefit our patients. We look forward to an even greater 2014.

Brad and Melissa Juneau with Charles D. Fraser, Jr., M.D., at the 2013 Fraser's Friends Fundrasier.

Introducing same-day surgical consultation appointments

Texas Children's Hospital is pleased to announce same-day surgical consultation appointments for each of the following surgical divisions: congenital heart, neurosurgery, ophthalmology, orthopedics, otolaryngology, pediatric general surgery, plastic surgery, urology and pediatric and adolescent gynecology.

Since September 2013,there has been, on average, more than 400 same-day appointments per month. By expanding access to care and offering more convenient appointment times, the department has seen a 49 percent decrease in third-available appointment rates and a decreased no-show appointment rate throughout the surgical outpatient clinics.

"This initiative is a collective promise from the Department of Surgery to its patients and referring collegues to be available. A delay in care, especially for surgical practices, can lead to unnecessary concern and frustration for patients and families, and can even affect treatment outcomes," said Dr. David Coats, chief of ophthalmology. "The surgeons are committed; our patients are greatly satisfied knowing we are here to care for them; and the hospital's network of referring physicians has been delighted with the ease, simplicity and timeliness with which their patients can be seen."

This initiative has been led by Dr. Larry Hollier, chief of plastic surgery, Dr. David Coats, chief of ophthalmology, and Trent Johnson, director, ambulatory surgery services.

For more information about the program, contact Trent Johnson at tdjohnso@texaschildrens.org. To schedule a same-day surgical consultation appointment, please call **832-TCH-APPT(832-824-2778)**.

Three years as surgeon-in-chief – An interview with Dr. Charles D. Fraser, Jr.

For almost three and a half years, Dr. Charles D. Fraser Jr., has been the surgeon-in-chief (SIC) of Texas Children's Hospital. This interview reflects on his tenure and provides insight to his vision for the Department of Surgery.

Q: How did you feel about taking on the role of SIC?

A: I was ready for the opportunity. There wasn't access or responsibility for how the subspecialties of surgery integrated with the hospital. I knew that if we could come together as a team, there would be so much more we could offer the hospital and our patients.

Q: What have been your proudest accomplishments as SIC, and what's in store for the future?

A: An early success was helping designate Texas Children's as a Level 1 trauma center. I'm proud of the expansion of our faculty including the growth of our advanced practice providers team. Also, our Outcomes and Impact Service has the potential to transform how we look at our work by diligently measuring our performance.

Dr. Allen Milewicz was recently named chief of community surgery to meet the growing surgical demands at our Texas Children's Hospital West Campus location in Katy, Texas, and four community health centers across Houston. When our second community hospital opens in The Woodlands in 2017, I'm sure the surgery department will have plenty of new opportunities there.

Additionally, we are in the middle of a nation-wide search for a chief of otolaryngology. We want our hospital and our efforts to bring in the best and brightest to make sure we are at the top of our game. After all, we are caring for children, and everything we do is to care for the most precious lives.

Q: What has been your biggest challenge as SIC?

A: The biggest challenge is time. It's important to me to remain a surgeon. It's what I'm good at, and it's what keeps me relevant as a surgical leader. This role has taught me a lot about time management. I've experienced a gratifying evolution to learn to depend on the enormously talented people that work in the department and throughout the hospital.

Q: What has the new responsibility taught you about leading a big department of surgery? What has it taught you about yourself as a leader?

A: I think that the most important lesson is that a leader has to be a servant. So many on our team exemplify the qualities of a servant leader, and I look to them for inspiration. For example, my scrub nurse Nina is with me in almost every surgery and at the hospital almost every day. This is a very committed group of people that deserves special recognition, and I'm privileged to serve with them.

Q: What lessons have you learned as SIC?

A: The more the medical staff is aligned with the hospital and views themselves as a part of the hospital, the more effective they can be. Basically, it comes down to teamwork. To be effective you have to be knowledgeable about what you can do to serve the hospital and not just how the hospital can serve you.

The Advanced Quality Improvement and Patient Safety Program

Since 2009, the Advanced Quality Improvement and Patient Safety Program (AQI) program at Texas Children's Hospital strives to improve care delivery, create quality leaders and change the culture. The program has over 142 graduates and 94 completed AQI projects.

"We are transforming care delivery through our AQI Program," said Margaret Holm, Ph.D., program director. Inside Surgery will feature an AQI project in each issue.

Featured Project: Optimize Timing of Antibiotics for Adolescent Idiopathic Scoliosis Surgery

Purpose: Standardize delivery timing of perioperative antibiotics to improve rates of optimal delivery time before incision

Team:

Project Executive Sponsor – Dr. Thomas Leurssen, chief of neurosurgery, chief quality officer, surgery

Team Members:

Dr. Megan May, sports medicine and pediatric orthopedic surgeon
Dr. Howard Epps, academic medical director, orthopedics and scoliosis
Charlene Hallmark, RN
Ken Kocab, RN
Brian Pickryl, MBA
Carrie Smith-Bruce, MSN

Situation: Optimal administration time of the initial dose of antibiotics is 15 to 45 minutes prior to incision and 4 hours +/- 30 minutes after the previous dose. Forty percent of the time antibiotics were given less than 20 minutes before incision.

Project Summary: A review of 56 cases revealed the surgical team performed a 13-step process prior to the surgical incision. In the process, the patient was placed in the prone position, on average, 33 minutes prior to incision. This information led the team to create a new process where the administration of the initial dose of antibiotics was administered prior to prone positioning. For redosing, discussion of the correct time for re-administration was added to the time out to increase team awareness, and a digital timer was used as a back-up reminder.

Results: The percentage of optimally timed pre-operative antibiotics increased from 54 percent to 93 percent in the first three months and 82 percent after six months.

"The AQI program provides knowledge related to the science of improvement and the opportunity to apply the newly acquired knowledge to our work immediately – we are correcting while educating," said Dr. Howard Epps.

Announcements

NEW PHYSICIAN HIRES

Sandi Lam, M.D., M.B.A. – Neurosurgery

TEXAS CHILDREN'S HOSPITAL DEPARTMENT OF SURGERY SEED GRANT RESEARCH AWARDS:

Jennifer E. Dietrich, M.D., Chief, Pediatric and Adolescent Gynecology - The Relationship Between Paratubal Cysts, Hyperandrogenism and Obesity

David Y. Khechoyan, M.D., Plastic Surgery - Evaluation of Outcomes in Craniosynostosis Surgery

Bindi Naik-Mathuria, M.D., Pediatric General Surgery - Utility of Near Infrared Spectroscopy in Pediatric Traumatic Brain Injury

Julina Ongkasuwan, M.D., Otolaryngology - Evaluation of Pediatric Vocal Fold Nodules Using Ultrasound

Abhishek Seth, M.D., Urology - Identification of Urinary Inflammation-Specific DNA Methylation Markers to Aid in Early Prediction of Severe Hemorrhagic Cystitis

Sanjeev A. Vasudevan, M.D., Pediatric General Surgery - MDM4 - A Potential Therapeutic Target for Hepatoblastoma

PROGRAMS

Texas Children's Pediatric Surgery Fellowship for Physician Assistants
This first of its kind in the country fellowship offers a year-long program to train physician assistants in the full spectrum of pediatric surgical subspecialties. For more information, visit texaschildrens.org/surgerypafellow.

2014 Edmond T. Gonzales, Jr. Surgical Research Day
Our physician-scientists are noted leaders in clinical and basic science research. Surgical Research Day is held in the interest of sharing the innovative work being done by our faculty, residents and students as well as highlight national issues in surgical research and ethics.

Friday, May 9, 2014

Texas Children's Pavilion for Women

Keynote Speaker: N. Scott Adzick, M.D., surgeon-in-chief and director, Center for Fetal Diagnosis and Treatment, The Children's Hospital of Philadelphia

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