

CENTRAL CALIFORNIA PEDIATRICS

SPECIALTY INFORMATION FOR PHYSICIANS
WHO TREAT CHILDREN AND EXPECTANT MOTHERS
SUMMER 2008

Pediatric Plastic Surgery

Nationally recognized physicians and researchers help the Valley's kids.

You may have seen the work of Children's plastic surgeons in the news. The media has run several stories on high-profile cases in which surgeons completed amazing reconstructions after major trauma. But the team does far more - everything from the management of complicated diaphragmatic hernias to taking care of moles, from managing facial cuts to closing difficult meningocele wounds with exposed hardware. And the division's volume shows that the need for this kind of specialty care has become very important to the Valley.

Led by Dr. Peter Witt, the division serves over 1,650 children every year, with over 4,000 combined visits, day surgeries and inpatient stays. And each year they perform 500 plastic surgeries. With increased volume came expanded access, and Dr. Witt and Dr. Angela Rodriguez have been joined by Dr. Mimi Chao Mills, giving the division three full-time, board certified/eligible surgeons.

The outcomes these surgeons post are impressive. Children's plastic and reconstructive surgery length of stay (LOS) is less than 3 ½ days, which is almost a full day shorter than the adjusted LOS for children having plastic surgery at 40 other pediatric hospitals across the nation.

Faculty in the division comprises highly trained, nationally-recognized researchers, who are involved in international outreach, and are committed to achieving the best clinical and aesthetic outcomes with the fewest risks. And their patient families appreciate it. Children's Plastic Surgery services scored a 91.1% on overall patient and family satisfaction.



Medical Director Dr. Peter Witt performs a cleft palate surgery. Dr. Witt is a nationally recognized expert in cleft lip and palate repair as well as the subsequent speech issues.

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Walking the walk

Using a national collaborative to improve outcomes.

Data-driven quality improvement is imperative in any hospital unit, and it is a constant focus in the 65-bed level III NICU at Children's Hospital Central California. The NICU has more than 260 specialty-trained staff members that treat almost 1,000 cases a year, totaling 20,000 patient days. Children's aggressive team-centered approach to constant improvement has helped the NICU post remarkable outcomes. Our outcomes with neonates under 1,500 grams are consistently better than other level III centers in the state. Our adjusted mortality rate for this population is 9.2% compared to a 12.2% California average. Our 'case-mix index' (a number that compares the severity of different populations), is the fourth highest of all 37 NICUs in a nationally comparative database. In other words, on average, the babies that come to Children's are more seriously ill than those that come to 33 of the other NICUs, and yet we have better results than all of our regional peers.

Complacency with success is considered unacceptable and has led the team to join national improvement initiatives. The NICU belongs to The Vermont Oxford Network (VON), an association of more than 700 NICUs around the world. VON uses an extensive shared-knowledge approach to performance improvement. In January 2007 Children's became part of VON's NICQ Quality Improvement Collaborative, joining 47 other units in a concentrated effort to further expand quality and safety in the nation's NICUs.

The Collaborative is a way of sharing and comparing data with other institutions and bringing their best practices to bear in the local setting. It's not easy to bring the subspecialty's best and the brightest together to make unified improvements nationwide, but that's exactly what the Collaborative does. And all of the ideas, practices, treatments and techniques developed are put into the hands of every VON member.

The current Collaborative began January 2007. The goals of this two-year project include:

- ▶ To develop new tools and resources for NICU improvement
- ▶ To disseminate the learning broadly in the neonatal community
- ▶ To make measurable improvements in quality and safety
- ▶ To engage families as team members for improvement
- ▶ To create a joyful and satisfying workplace that promotes personal and professional growth



Improving infant growth in the NICU has been linked to later cognitive development. Children's NICU has taken on a study that will progressively determine the best way to do this.

Each NICU team in the Collaborative joined a learning and improvement community (LIC), a multi-hospital group that focuses on improving key NICU processes, with the emphasis on standardizing one process first with the goal of repeatability for the next. Between meetings of the Collaborative, teams work together through conference calls and email discussion lists.

The Children's team is led by NICU Medical Director Dr. Krishna Rajani. Dr. Rajani oversees and coordinates all efforts associated with the Collaborative, assuring that the work materializes as real improvement in the NICU.

During the Collaborative's first year Children's chosen role was to focus on standardizing nutrition practices for infants weighing less than 1,500 grams. Children's NICU admitted 294 babies last year who weighed less than 1,500 grams, and more than half of those weighed less than 1,000 grams. The team recognized that extra-uterine growth failure serves as a predictor of poor neuro-cognitive outcomes. In the past it was believed that growth after discharge was a good indicator, but data now shows that growth in the NICU is a key to a positive long-term outcome.

The NICU's goals and measurement points were to reduce by 50% the prevalence of extra uterine growth failure, (specifically to be at or above the 10th percentile on the growth



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chart for gestational age at discharge), to increase by 70% the number of infants started on feeds within the first 3 days of life, and finally to increase by 50% the number of infants started on Total Parenteral Nutrition (TPN) within 6 hours of life.

A year into the Collaborative and improvements have been demonstrated in all three of the identified measurement points. At the beginning of the study 32% of the patients were at the desired 10th percentile. Today, 59% of patients reach that goal. By the time the study ends in 2009 it is expected that 85 – 90% of patients under 1,500 grams will reach this goal. Time to TPN is down 30%. That's good progress and the team expects to meet all goals and be able to share its data and experiences with the rest of the Collaborative next year.

Additional performance improvement areas being addressed by Children's NICU in year two of the Collaborative are to reduce by 50% the incidence of catheter associated blood stream infections and late bacterial infections in all weight strata by November 1, 2008.

Besides gathering and sharing data and research, the hospitals participating in the Collaborative meet twice a year to discuss and learn from each other in a face-to-face environment. Meetings include interactive plenary presentations by experts in health care quality and safety, small and large group exercises, and a learning fair in which teams share improvement examples.

All of the LIC's are guided by a common set of themes. Every process should be improved in such a way as to achieve results related to the themes adapted from the Institute of Medicine's Principles (Crossing the Quality Chasm, IOM, 2001).

PICU Measurement

Unit benchmarked in the nation's top 10%.

The Pediatric Intensive Care Unit (PICU) at Children's Hospital Central California is one of the largest PICUs in the country based on bed capacity, but it's another ranking that matters most. In the field of intensive care, severity adjusted mortality rate is a key baseline benchmark, and in this arena Children's PICU is ranked in the best 10% in the country.

The PICU is licensed for 34 beds and is a combined medical/surgical unit. The most recent expansion of six additional beds was completed in the fall of 2007. Twelve of the ICU rooms are equipped to convert to surgical suites if an emergent event presents itself.

The mortality rates are collated from a validated data set which consistently ranks Children's in the top 1-2 PICU's out of 33 benchmarked units for the past decade. Great teamwork between the PICU staff, transport team (both ground and air), and a board certified pediatric intensivist group, on duty around-the-clock, contribute not only to the PICU's great outcome data but also to the Unit's high patient satisfaction scores. The intensivists' presence means that attending physicians are always in the Unit, and residents are never left without the support of an experienced specialist.

Achieving this level of success is a result of constant efforts to improve quality and performance. Children's PICU is currently engaged in a number of projects toward that end. For example, the PICU has initiated an electronic insulin protocol research study for non-diabetic patients in which well established protocols are applied and then adjusted based on a



Dr. Newton Seiden, Intensivist and Children's Hospital Chief of Staff.

prescribed dataset for the individual patient. To date this ongoing study has proved to be simple to implement and outcome positive. Additionally, the PICU is part of a collaborative within NACHRI (National Association of Children's Health and Related Institutions) to reduce catheter associated blood stream infections. This research project is part of a national collaborative which has completed Phase I with a significant reduction of blood stream infections and is now embarking on Phase II which will add additional study and refinement to both insertion and care of central lines.

Children's PICU will continue to seek opportunities to improve the level of quality and service to patients, their families and customers. An additional eight bed PICU expansion will be completed in approximately three years.

Our New Team Members



Radiology: **Fred Laningham, MD**

Dr. Fred Laningham has returned to the Central Valley to join Wishon Radiology Medical Group and Children's Hospital Central California. Born and raised in Bakersfield, Dr. Laningham's expertise is in Neuro-imaging and MRI. Most recently serving at St. Jude Children's Research Hospital, Dr. Laningham brings seventeen years of experience to our organization.

Dr. Laningham played baseball while earning his B.S. at Stanford University before receiving his Medical Degree from the University of Arkansas for Medical Sciences and being elected into the Alpha Omega Alpha Honor Medical Society. He went on to the University of Tennessee to complete his Residency in Radiology. Dr. Laningham then pursued a Fellowship in Pediatric Radiology at Harvard Medical School, Boston Children's Hospital.



Plastic Surgery: **Mimi Chao Mills, MD**

Dr. Chao Mills has joined Drs. Peter Witt and Angela Rodriguez in Children's Plastic Surgery Department. Dr. Mills earned her Medical Degree from the University of Iowa College of Medicine and was elected into the Alpha Omega Alpha Honor Medical Society. She completed her surgical internship and residency at St. Louis University School of Medicine, St. Louis University Hospital. She most recently completed a Craniofacial/Pediatric Plastic Surgery Fellowship at Children's Hospital of Pittsburgh. She is fluent in English and Chinese.

Otolaryngology: **Jairo Torres, MD (not pictured)**

Dr. Torres will be joining Dr. Michael Dunham and Children's Hospital Central California in September 2008. Dr. Torres earned his Medical Degree from Universidad del Valle Facultad de Medicina in Cali, Columbia. He completed his Otolaryngology training at the University Hospital of Cleveland. Dr. Torres is fluent in English and Spanish.

Hematology/Oncology: Ruetima Titapiwatanakun, MD

Dr. Titapiwatanakun received her Medical Degree with honors from Mahidol University in Bangkok, Thailand. She completed her Pediatric Residency Training at Mount Sinai School of Medicine in Jersey City, NJ and went on to pursue a Fellowship in Pediatric Hematology/Oncology at the Mayo School of Graduate Medical Education in Rochester, MN. She will join Specialty Medical Group and Children's Hospital Central California in August 2008.



Other Medical Staff Changes

Dr. Donald Fields has moved from his role in Child Advocacy to pediatric care and **Dr. John Kinnison** has increased his focus on Child Advocacy.

Dr. Cherie Ginwalla, currently practicing in the Charlie Mitchell Clinic is moving to UC Davis in Sacramento.

Dr. Mathew Halsey, Orthopaedic Surgeon is moving his practice to Portland, Oregon.

Dr. William Henrikus, Orthopaedic Surgeon, is moving his practice to Pennsylvania.



Referring a Patient

For urgent referrals, or to transfer a patient, call our Transfer Center toll free at **866.353.KIDS (5437)**. Or go online to childrenscentralcal.org for a complete list of physician office numbers and information.

Outreach Centers:

Merced Subspecialty Pediatric Center

209.726.0199

Modesto Subspecialty Pediatric Center

209.572.3880

For a copy of Children's Quick Reference Telephone Guide, call 559.353.6621.

PEDIATRIC PLASTIC SURGERY CONTINUED FROM PAGE 1 >>

The team has years of experience in diagnosing and treating children with craniofacial anomalies, including craniosynostosis, cleft lip and palate, microtia, and facial asymmetry. Our qualified experts manage congenital hand problems (webbed fingers, extra digits, absent digits), vascular anomalies (hemangiomas or vascular malformations), in addition to pediatric trauma (facial fractures, lacerations, scars).

Specialists provide consultations for soft tissue tumors, dental malocclusions, breast hypertrophy/asymmetry, and burn reconstruction. They also provide preterm counsel, including pre-delivery nursing education, for expectant mothers with intrauterine-diagnosed anomalies.

There is no other service like this in all of Central California, and this highly-specialized team helps provide solutions to complex pediatric soft tissue conditions. They work closely with referring physicians to positively improve the quality of life of all patients.

Prenatal Diagnostic Center

Service grows to meet the needs of referring physicians and expectant mothers.

Dealing with expectant mothers of advanced maternal age, family history of genetic disease or positive Ca. Quad Marker Expanded alpha fetoprotein (AFP) tests can be a time consuming challenge in a busy medical practice. Taking the time to determine the appropriate testing, interpreting the results for the patient, counseling them on their options and making arrangements for the follow-up care of the newborn may take several visits to your office and to multiple locations for diagnostic tests for the parents.

Children's Hospital has gathered a team of experts together into a "one stop shop" capable of providing the latest technology in prenatal diagnostic testing, genetic counseling and physician consultation. Patients can be managed through the entire prenatal diagnostic process with minimal impact on your practice.

The ARDMS credentialed sonography staff at Children's is among the best trained in the area and able to offer first trimester (nuchal translucency) screening. Patients who screen positive are immediately scheduled for follow-up confirmatory testing later in their pregnancy. Board certified pediatric radiologists offer advanced skills in performing amniocenteses and interpreting fetal ultrasounds. Genzyme genetics performs a broad array of genetic disease tests with very rapid turnaround time. Our licensed Genetic Counselors work with our board certified Geneticists to interpret



Joy Guthrie, DHSc, RDMS, RDCS, RVT, ROUB, is one of only two sonographers out of 52,000 in the United States who have all ten ultrasound certifications.

the test results and provide information to the parents about options and prognosis for their unborn child.

For expectant mothers who have tested positive in the State's Alpha Feto Protein program, Children's is a recognized referral site for follow-up services.

For more information about Children's Prenatal Diagnostic Center, please call 559.353.5916.

Amazing People

Children's lead sonographer, Joy Guthrie, is proof that expertly-trained staff are as important as state-of-the-art equipment. "In ultrasound, the image isn't created by the machine, it's



created by the sonographer. If you don't know anatomy and pathophysiology well, there is a potential of not getting the area of interest on the image. Then there's no way the radiologist or cardiologist can interpret something that's not on there," says Joy. "If you have knowledge of what you are looking at, what you see in a situation, what's abnormal and where to go from there, you can ensure that those essential images will be there for the medical specialist to interpret."

Joy has been with Children's for 10 years. She is one of only two sonographers – out of 52,000 in the U.S. – who have passed all ten ultrasound certifications.

Joy D. Guthrie, DHSc, RDMS, RDCS, RVT, ROUB

Expansion to focus on evidence-based design

Children's will break ground at the end of this year on its largest expansion since the opening of the new Hospital ten years ago. The project will take two to three years and add 60,000 square feet, expanding pediatric intensive care, operating rooms, imaging and emergency department capacity.

The state-of-the-art expansion will include:

- ▶ Minimally invasive surgical suites equipped with advanced audio-visual technology designed to reduce dependence on mobile equipment, increase patient flow and improve patient outcomes;
- ▶ Installation of a new GE Signa HDx 3.0T MRI scanner with unprecedented imaging speed, resolution, and contrast in neurovascular, cardiovascular, abdominal, orthopaedic and spectroscopic imaging;
- ▶ Installation of GE's MPi radiography and fluoroscopy imaging system, which includes an interventional package as well;
- ▶ Installation of GE's Definium 8000 digital radiographic system, which offers excellent image quality with proven dose efficiency;
- ▶ Two new ultrasound suites equipped with the latest technology.
- ▶ Two, large state-of-the-art trauma rooms.
- ▶ Eight major care exam rooms in the ED.
- ▶ An eight bed PICU addition, giving a total of 42 beds.
- ▶ Shell space for future growth.

Further, evidence-based design principles were utilized to improve patient safety and increase care delivery effectiveness, resulting in:

- ▶ Decentralized nurses stations.
- ▶ Enhanced noise barriers.
- ▶ Single patient rooms.
- ▶ Integrated wayfinding.
- ▶ Equipment standardization.

Designed with sensitivity to the existing campus architecture and to affect appropriate adjacencies to existing services, the new addition will be a seamless modernization to the existing Hospital.



Architect's illustration of Children's expansion.



PhysFocus

Irene M. McAleer, MD, FAAP, FACS joined Children's Pediatric Urology department in July 2007. Dr. McAleer graduated from Ohio State University College of Medicine, finished her Urology Residency at the National Naval Medical Center in Bethesda, Maryland and completed a Pediatric Urology Fellowship at the University of California, San Diego in 1990. She is board certified and focuses solely on pediatric urology. She was the Director of Pediatric Urology at the National Naval Medical Center and Walter Reed Army Medical Center before becoming an attending pediatric urologist at Children's Hospital, San Diego, Children's Hospital, Austin, Texas and the Connecticut Children's Medical Center. Academic appointments include Assistant Professor of Urology and Pediatrics at UC San Diego and The University of Connecticut, and Associate Director of Pediatric Urology at Children's Hospital, San Diego. She was recently granted an Assistant Professorship (clinical) at UC San Francisco, Fresno. She has published over 60 medical publications in urologic journals and texts and continues to review journal articles for several major urological publications.

Dr. McAleer is the past president of the American Association of Pediatric Urologists and belongs to other professional organizations including the American Academy of Pediatrics, the American Urological Association, and the American College of Surgeons.

Dr. McAleer cares for pediatric conditions including, pre and post-natal care of congenital problems of the kidneys/bladder and genital tract and manages and performs surgical procedures for hypospadias, undescended testes, hernias, hydroceles, vesicoureteral reflux, urinary tract obstruction, urinary stone disease, and neurogenic bladder conditions associated with spina bifida disorders.

CME Calendar

« **September 4:** Advancing Quality through Cultural Awareness and Responsiveness. 8 a.m. to 4 p.m. at Children's Hospital. Increase your cultural awareness in the health care setting.

« **Every Tuesday & Thursday:** Pediatric Consulting & Subspecialty Lectures. 12:30 to 1:30 p.m. August Series: Pediatric Emergency Care.

For a complete list of monthly CME topics visit www.childrenscentralcal.org. Children's Hospital is accredited by the Institute for Medical Quality/California Medical Association (IMQ/CMA) to provide continuing medical education for physicians. For questions about our CME program, contact Norma Barajas, PhD at 559.353.7230 or email nbarajas@childrenscentralcal.org

Pediatric Clinical Symposium

A post graduate continuing medical education (CME) symposium for the general, family and pediatric practitioner.

You are invited to join us at Children's Hospital Central California for this exciting CME course designed with a particular emphasis on providing state-of-the-art information pertinent to the recognition, diagnosis and treatment of the most prevalent conditions encountered in a pediatric practice.

Saturday November 1, 2008

8:00 a.m. – 1:30 p.m.

Children's Hospital Central California

9300 Valley Children's Place

Madera CA

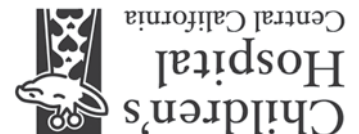
This half-day Saturday program will focus on advances in pediatric practice including:

- ▶ Neurosurgery
- ▶ Orthopaedic Surgery
- ▶ Otolaryngology
- ▶ Urology

Tours of the hospital will also be available to those wishing to view the facility.

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