



## A MORE NORMAL RANGE OF MOVEMENT LPCH PHYSICIANS HELP IMPROVE THE LIVES OF MOTOR DISORDER PATIENTS

Catching a ball or walking gracefully are difficult skills for any young child to master. Such tasks may be permanently out of the question for a child with a motor disorder, symptoms of which vary in severity from mild clumsiness to an inability to sit, walk, feed oneself or talk. However, medications and rehabilitation therapy can often result in meaningful improvements even for children who depend on wheelchairs.

"People see complicated, sick-looking kids that can't walk, and they think that nothing can be done," says Lucile Packard Children's Hospital neurologist Terence Sanger, MD, PhD. "But we can make a tremendous difference in their quality of life even with small improvements. The point is, you've got to try." A 20 percent gain in function can allow a child to use a fork for the first time, or to utilize more buttons on a communication device, according to Sanger.

As the medical director of the Packard Children's Hospital movement disorders clinic, Sanger is one of fewer than 10 physicians in the country specializing in childhood movement disorders. He and his colleagues treat a variety of conditions including dystonia, spasticity, choreoathetosis, ataxia, myoclonus, bradykinesia and tremor. Although many of these conditions are associated with

specific diseases in adults, such as Parkinson's disease and Huntington's disease, the same symptoms in children can present a significant diagnostic challenge.

"The largest single cause of childhood motor disorders is cerebral palsy," says Sanger. But he cautions against using a blanket diagnosis to explain troublesome symptoms. "There are many diseases that look exactly like cerebral palsy but are not. Many of these diseases can be treatable. Any time the symptoms aren't completely consistent with cerebral palsy, you've got to look into it. Occasionally we pick up things such as dopa-responsive dystonia or other metabolic disorders that can be cured or that respond to specific treatment."

The interplay between development and an emerging motor disorder can be complicated: some birth injuries don't become obvious until the child begins learning to walk, run or perform other highly coordinated activities, while other motor disorders wreak havoc by interfering with critical developmental steps.

For example, involuntary muscle contractions leading to fisting or back arching can prevent even very young infants from learning important skills such as reaching for and manipulating objects. Relaxing the muscles with medications can allow the child to continue normal development and, in a few instances, even prevent the condition from returning after treatment is discontinued.

"Development in kids means that things change with time, often quite dramatically," says Sanger. "A physician needs to be in tune with normal



**TERENCE SANGER, MD, PHD**  
Director of Movement Disorders Clinic

development. A stiff walk when a child is 12 to 14 months old may not mean anything, but at two years you should be concerned."

Even children with mild disorders can benefit from early identification and treatment. "An important goal of our clinic is monitoring, sometimes of children as young as three to five months old," says Sanger. "We really want to pick up problems early, when evidence suggests that the available treatments are more effective. Don't wait to refer a child until there are no other options."

One of the most common symptoms in children with movement disorders is stiffness. Sanger recommends physical therapy or specific medications to relax the muscles to allow a more normal range of movement. "We strive to maintain a balance when working to weaken a muscle that's too tight," says Sanger. "If a child is walking on his or her toes, we can often relax the muscles enough to allow normal

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Continued from cover

walking.” Although many people are familiar with the use of botulinum toxin for cosmetic purposes, it can also be very helpful to relax stiff muscles in the legs or arms of children with movement disorders.

Sanger and his colleagues also offer intrathecal baclofen therapy for children with severe dystonia or spasticity that does not respond to oral medications and deep brain stimulation for motor disorder patients for whom surgery is the last option. The two treatments can offer significant improvement for appropriately selected patients, according to Sanger.

In addition to his clinical duties, Sanger is working on several research projects aimed at developing new ways to measure and treat children with movement disorders. He is currently recruiting children with arm stiffness or dystonia to participate in two medication trials at Packard Children’s Hospital, as well as a trial of special movement measuring technology at Stanford University School of Medicine.

One clinical trial is attempting to determine whether botulinum toxin, injected in the arms, can improve the ability to reach toward objects. The other trial is designed to determine whether Artane, a drug originally developed for use in adult Parkinson’s patients, can improve the quality and speed of arm movements in children. He also heads an NIH-funded task force dedicated to identifying current problems and solutions in childhood motor disorder treatment and edits the contents of a Web site for parents and healthcare professionals devoted to pediatric motor disorders.

**For more information** on pediatric movement disorders, visit [www.wemove.org/kidsmove/](http://www.wemove.org/kidsmove/). To make an appointment at the movement disorders clinic, call 650-723-6841. To speak with Terence Sanger’s office or for more information about clinic appointments or clinical trials, call 650-736-2154.

Sanger is currently recruiting children for two medication trials, as well as several assessment and measurement studies. He is seeking children between the ages of two and 18 years old with arm stiffness, increased or involuntary movements, poor accuracy or other difficulties in moving one or both arms. For more information or to enroll a child in a trial, please call study coordinator Sara Sherman-Levine, RN, at 650-736-1185, or Sanger’s office at 650-736-2154.

### MOTION AND GAIT ANALYSIS LABORATORY AT LPCH

The Motion and Gait Analysis Laboratory at Lucile Packard Children’s Hospital provides computer-based comprehensive gait evaluation of both the upper and lower extremities for patients from much of Northern California and the surrounding states. The clinical and research laboratory uses the following techniques to quantify the nature and severity of neuromuscular and musculoskeletal abnormalities:

- **Kinematic and kinetic data.** Reflective markers aligned with the patient’s legs, pelvis and trunk provide a three-dimensional picture of the motion and angles of the joint. Kinetic data measure the forces and movements that cause the motion.
- **Dynamic electromyography (EMG) analysis.** Measurements of muscle activity help determine the contribution of each muscle to the disability. Pressure-sensitive foot switches correlate EMG data with the stance and swing phases of gait.
- **Energy expenditure analysis.** Measurements of the conservation and expenditure of energy while walking.
- **Postural equilibrium analysis.** Measurements of body sway assess balance impairment and adaptive response.

Laboratory staff, which includes physical therapists, engineers and a research psychologist, work with the referring physician to identify the primary cause of the patient’s movement disorder and recommend specific surgical

or medical treatments. Referring physicians will receive a CD-ROM with video documentation of the patient walking and/or jogging, EMG graphs and kinematic and kinetic data.

In addition to assisting in the analysis of treatment options and surgical outcomes for children, the laboratory has partnered with the division of neonatology to predict gait problems in infants. Timely intervention can prevent the development of deformities that are very difficult to correct once they are established, according to laboratory director Jessica Rose Agramonte, PhD.

“If we know that a child is at risk for developing an abnormality, we can put them on a program that monitors muscle and bone growth and possibly prevent contracture with therapies that keep muscle length in proportion with bone,” says Agramonte.

Agramonte and her colleagues are also researching the causes of muscle spasticity and weakness in cerebral palsy. Their studies suggest that, in contrast to conventional wisdom, strength training exercises might be advantageous for these patients. In the past, many patients and doctors avoided exercise, because it was thought to bring on spasticity.

To refer a patient to the Motion and Gait Analysis Laboratory, call 650-723-5308 or 650-497-8084. The lab, which is open Monday through Friday from 8 am to 5 pm, is located at 1101 Welch Road, Suite C-10, near Stanford Hospital and Clinics.



## PEDIATRIC RHEUMATOLOGY TEAM GAINS NEW MEMBER

### SPECIALIZED CARE FOR CHILDREN AT LPCH

Nearly 300,000 children in this country have arthritis or other debilitating diseases. But a dearth of pediatric rheumatologists, coupled with an under-recognition of the disorders, conspires to deny many young sufferers access to medical treatment that could make a tremendous difference in their lives.

“It’s not unusual to discover someone out there for a year or two who’s just in horrible shape. It’s distressing how many patients don’t get to someone who can take care of them,” says Christy Sandborg, MD, chief of pediatric rheumatology at Lucile Packard Children’s Hospital and associate professor at Stanford University School of Medicine. “But when we do get the patients, we can make such a dramatic change in how they’re doing by recognizing and treating the condition correctly.”

Despite the prevalence of these conditions, pediatric rheumatology became a sub-specialty only about 20 years ago. There are fewer than 200 board-certified pediatric rheumatologists in the country and fewer than 40 pediatric rheumatologists in training. Packard Children’s Hospital’s pediatric rheumatology program cares for children from California, as well as Nevada and Arizona—states without a single practicing pediatric rheumatologist. Packard has one of only 21 centers in the country dedicated to training new fellows in the field.

In July, Sandborg and pediatric rheumatologists Elizabeth Mellins, MD, and Vivian Saper, MD, will be joined by former pediatric rheumatology trainee Tzielan Lee, MD. The addition will allow the center to see a larger number of patients in a timely manner.

Rheumatic disorders can strike children of all ages and backgrounds. The most common is juvenile rheumatoid arthritis, or JRA. It can strike as early as one year of age, causing joint pain and swelling and difficulty walking. JRA and other rheumatic disorders can also cause skin rashes and fevers, muscle weakness or other systemic illness and, in severe cases, compromise the heart, lungs and kidneys.

If left untreated, rheumatic disorders would be the most common cause of acquired disability in childhood.

Although the specialists at Packard Children’s Hospital provide ongoing care for about 700 children, many others slip through the cracks, going undiagnosed or receiving inappropriate treatment. Sandborg estimates that more than two-thirds of children with rheumatic diseases in the greater Bay Area are not being treated by physicians experienced in pediatric rheumatology.

“Adult rheumatologists often don’t understand what it takes to treat kids,” says Sandborg, citing a recent example of a newly arrived Packard Children’s Hospital patient. “The previous doctor didn’t understand the risk of continued steroid treatment in a child.” Because steroids can inhibit growth, the 11-year-old patient was the size of a five-year-old.

In addition to considering a child’s special nutritional and development needs, Sandborg and her colleagues are cultivating a greater understanding about how the disease affects their young patients. Mellins is using microarray technology to study why some children with JRA are more severely affected than others and why patients with JRA don’t always respond in the same way to identical treatments. The researchers are also participating in the largest-ever clinical trial of pediatric systemic lupus erythematosus, testing the use of statins to prevent the premature atherosclerosis that can afflict lupus patients.

“Our goal is to keep all of our patients functioning to the best of their ability. Ultimately we would like to control the symptoms and put the diseases into remission,” says Sandborg. “If we can understand why some children have more severe disease or respond to certain medications, we may be able one day to predict within the first couple of months after diagnosis the safest and most efficacious treatment plan for each patient.”

In addition to JRA and lupus, childhood rheumatic disorders include juvenile



**CHRISTY  
SANDBORG, MD**  
Chief of Pediatric  
Rheumatology

dermatomyositis, juvenile ankylosing spondylitis, scleroderma, and fibromyalgia—nearly all of which are autoimmune diseases. Treatment may include modified steroid regimens, partial-strength chemotherapy and new biologic treatments to tame the out-of-control immune and inflammatory cells.

Although most patients are treated as outpatients, a few are very ill and require hospitalization for complications such as renal failure and heart disease. Sandborg emphasizes that effective treatment is available even for the sickest patients.

To help patients stay in school and grapple with family issues during their treatment, Sandborg and her colleagues rely on a team that includes, among others, nurse specialists, social workers and physical and occupational therapists. The team is skilled in guiding patients through the transition from adolescence to adulthood—a time when many teens might be tempted to give up on their treatment for cosmetic and social reasons.

“We try to help them understand their disease enough to take control of it as an adult,” says Sandborg. “We watch our patients grow up and, in some instances, have kids of their own. Often, after we’ve helped them through their childhood and teenage years, they say ‘Thank you so much for not giving up on me.’”

**For more information** or to refer a patient to the pediatric rheumatology center, please call 650-498-4224. To reach Christy Sandborg or her colleagues, call 650-723-8295.

## NEW CENTER TO FOCUS ON PRIMARY IMMUNODEFICIENCY DISORDERS

### MANY PHYSICIANS UNAWARE OF SYMPTOMS OF SERIOUS IMMUNE DISORDERS



**DAVID LEWIS, MD**  
Director of the Center for  
Primary Immunodeficiencies

Lucile Packard Children's Hospital and Stanford University School of Medicine, along with the New York-based Jeffrey Modell Foundation, joined forces in April to study and care for children with primary immunodeficiencies, a group of more than 100 inherited disorders that affects the health of thousands of children nationwide. The health consequences of the frequently undiagnosed disorders can include death or severe, life-threatening infections.

Many physicians are unaware of the importance of making an early diagnosis, says David Lewis, MD, associate professor of pediatrics at Stanford University School of Medicine and director of the new center. "They feel that the disorders are so rare that they'll never see these kids." Although some of these disorders affect one in 500 children, others may impact only one in a million.

"If you make the diagnosis before the child develops a really serious infection, you may save the child's life," says Lewis, who is also a physician at Lucile Packard Children's Hospital. "There are important medical interventions that can be done for almost all of these kids."

Although most children with primary immunodeficiency disorders exhibit some symptoms by age six, children with severe cases, such as severe combined immunodeficiencies, should be seen by a clinical immunologist as early as possible, ideally before six months of age, according to Lewis.

"I'm concerned that we may be missing some children with primary immunodeficiency, particularly in the Central Valley," says Lewis. "We're hoping to reach out to the Hispanic community and minorities where we feel these diseases may be underdiagnosed."

Treatments vary according to the type of immunodeficiency. Children who lack functional B cells receive infusions of intravenous gamma globulin; those with more severe immunodeficiencies, such as those involving T cells, may need a hematopoietic stem cell transplant to reconstitute their entire immune system.

The inherited nature of the disorders also means that they can vary in severity. "We think there are quite a few children who have very mild disorders that are the result of partial genetic defects," says Lewis. "In most instances, these have not been looked for in a systematic way."

The Stanford/Packard center is the newest in the network of Jeffrey Modell Centers in Boston, New York, Seattle, Toronto, Paris, Stockholm and Haifa. The Modell Foundation was established 16 years ago by Fred and Vicki Modell in memory of their son, Jeffrey, who died at age 15 of a primary immunodeficiency disease. The mission focuses on research, physician education, patient support and public advocacy.

**For more information** about primary immunodeficiencies, visit [www.info4pi.org](http://www.info4pi.org). To speak with David Lewis, call 650-498-4189. To refer a patient to Packard Children's Hospital's Center for Primary Immunodeficiencies, call Christa Parrish at 650-723-5682.

#### WARNING SIGNS OF PRIMARY IMMUNODEFICIENCY

Warning signs of possible immunodeficiency include, among others:

- Two or more episodes of pneumonia within one year
- Failure of an infant to gain weight or grow normally
- Family history of primary immune deficiency
- Eight or more new ear infections within one year
- Two or more serious sinus infections within one year
- Two or more months on antibiotics with little effect

Other signs of an underlying immunodeficiency include:

- Recurrent deep skin or organ abscesses
- Persistent thrush in the mouth or elsewhere on skin after one year of age
- The need for intravenous antibiotics to clear infections
- Two or more deep-seated infections such as meningitis, osteomyelitis, cellulitis, or sepsis



## CURBING ANXIETY IN CHILDREN

VOLUNTEERS SOUGHT FOR STUDY



**MARGO THIENEMANN, MD**  
Director of the Anxiety Clinic

More than one in 10 children in the Bay Area have an anxiety disorder—a psychiatric condition often characterized by an inappropriate fear of normal situations or events. For these children, sweaty palms, headaches and stomach butterflies can make meeting new people or socializing in a group nearly impossible. Their tendency to shun any deviation from their normal routine can have long-lasting repercussions.

“These disorders don’t just cause suffering,” says Margo Thienemann, MD, director of the anxiety clinic at Lucile Packard Children’s Hospital. “Childhood anxiety can be a serious problem that increases the risk of having an anxiety or depressive disorder in adulthood. These children also often avoid activities that they could enjoy or that could enhance their development both socially and academically.”

Thienemann and her colleagues are seeking anxious children ages eight to 17 and their parents for two studies of pediatric anxiety disorder.

Children with anxiety disorders are often reluctant to be separated from their parents and may resist attending school or sleeping in their own bed. Normal situations can give rise to stomach aches, shallow breathing, headaches, sweating and shakiness.

Thienemann’s studies focus on the interaction between parents and children, emphasizing ways that parents can support their children and investigating how parents may inadvertently contribute to their child’s anxiety. The first study pairs a free family evaluation with a 12-week course for parents of children with anxiety disorders.

“We’re going to teach parents all about anxiety: what it is, how to deal with it and how to intervene appropriately,” says Thienemann. Participants will be randomized to begin the course immediately after the evaluation or after a lag of two or four weeks.

“We’ll discuss ways that anxious children think and why they may be inappropriately scared. We’ll also talk about how to help a child approach and expose themselves to situations they find frightening,” says Thienemann. Techniques may include encouraging the child to practice confronting their fears in small, achievable steps and helping parents understand how unrealistic expectations can contribute to a child’s anxiety and avoidance of an activity.

The second study, which requires one or two clinic visits, will measure the parent and child’s heart rate, breathing, temperature and galvanic skin response as they discuss first neutral topics and then situations that provoke the child’s anxiety.

“We have very little information about how anxious children react physiologically,” says Thienemann. “This will be the first time that anyone has correlated verbal and physiological responses during parent-child interactions.”

Participants in this study will receive a small remuneration as a token of gratitude. Interested families are free to participate in both studies.

**For more information** or to enroll in a study call 650-723-5383 or 650-723-7947.

## INPATIENT LIAISON

NEW SUPPORT FOR COMMUNITY PHYSICIANS



**PATTY WANG, RN**  
Inpatient Liaison

Lucile Packard Children’s Hospital has initiated a new service to help community physicians admit patients and obtain patient discharge information and notification of emergency department visits. Patty Wang, RN, is one of a team of new inpatient liaisons for community physicians. The liaisons will be available to assist with clinical information retrieval, communication with faculty and other clinical needs of pediatricians.

The primary function of the new inpatient liaisons is to:

- Help find inpatient placement at LPCH. If LPCH beds are unavailable, to assist in locating an appropriate placement within the community.
- Provide an interim discharge summary via fax, upon discharge (within the next two business days).
- Notify physicians via fax of patients’ emergency room visits (the next business day).
- Serve as a point of contact for any other necessary information.

An inpatient liaison will be available Monday through Friday, 9:30 am until 6:00 pm. After-hours calls will continue to be handled by the nursing supervisor. To contact the inpatient liaison, call the LPCH Physician Hotline at 800-995-LPCH (5724) and ask to speak with the inpatient liaison. After hours, the hotline will roll over to ProComm Answering Service, which will immediately connect callers with the nursing supervisor or page operator if they prefer to speak with the faculty on call.

The goal of this new program is to improve service to community physicians. Please contact Terry O’Grady, RN, director of community and physician relations, at 650-497-8408 or [to'grady@stanfordmed.org](mailto:to'grady@stanfordmed.org) with questions, concerns or suggestions regarding this program.

## LUCILE PACKARD CHILDREN'S HOSPITAL RESEARCHER HONORED



**GREGORY BARSH,  
MD, PHD**  
Professor of Pediatrics  
and Genetics

Lucile Packard Children's Hospital geneticist Gregory Barsh, MD, PhD, received the E. Mead Johnson Award for Research in Pediatrics at the annual meeting of the Pediatric Academic Societies in Seattle.

The award, sponsored by Mead Johnson Nutritionals and given by the Society for Pediatric Research, honors clinical and laboratory research achievements. Barsh joins an impressive list of previous winners of the well-regarded award from Lucile Packard Children's Hospital.

"This is the most prestigious award in pediatric research," says Alan Krensky, MD, the Shelagh Galligan Professor of Pediatrics and a member of the award committee. Past recipients of the award include Irving Schulman, MD, former chair of pediatrics and Packard chief of staff; Ann Arvin, MD, chief of infectious disease at Packard Children's Hospital and the Lucile Salter Packard Professor of Pediatrics; Mark Kay, MD, PhD, professor of pediatrics and genetics; and Krensky himself. The award is given to two scientists nationally each year.

"I am both thrilled and surprised to be selected for the award, because there are so many great scientists doing pediatric research," says Barsh, who is a professor of pediatrics and genetics. Barsh received the award for his application of a model genetic system based on mouse pigmentation to problems in human disease.

"It's increasingly understood that genetic changes are extremely important, particularly in childhood diseases," says Krensky. "Dr. Barsh has used a common

trait—the hair color of mice—to define basic principles of genetics that will lead to a better understanding of congenital genetic diseases."

Barsh's most recent research finding, published in the Jan. 31 issue of *Science*, linked a mutation called mahoganoid, which changes the hair color of laboratory mice from brown to black, to the development of small holes in the brain that resemble those that develop in prion disease. The research marked the first time that such spongiform degeneration was linked to a defect in protein degradation and lent further support to the growing notion that glitches in protein turnover may be the unifying element in many neurodegenerative disorders.

Barsh and this year's other winner, Val Sheffield, MD, a geneticist at the University of Iowa, each received a \$10,000 honorarium, a plaque and travel expenses to the meeting, where they presented a short talk to the audience about their research.

In addition to garnering awards, Packard Children's Hospital physicians also assume national leadership roles in pediatric academic societies. Here are just a few examples:

- Dan Bernstein, MD, co-director of the Children's Heart Center and chief of the division of pediatric cardiology at Packard Children's Hospital, is the current president of the Society for Pediatric Research.
- David Stevenson, MD, chief of neonatology, is the program committee chair of the Pediatric Academic Societies' Annual Meeting. Stevenson also serves as a council member for the American Pediatric Society.
- Michael Link, MD, chief of pediatric hematology/oncology, is the associate chair of the Children's Oncology Group.
- Alan Krensky MD, chief of pediatric immunology and transplantation biology and co-director of Packard's new center to study primary immune deficiencies, is a past president of the Society for Pediatric Research.

### ADVANCES IN PERINATAL AND PEDIATRIC NUTRITION CONFERENCE

Lucile Packard Children's Hospital and the hospital's Center for Pediatric Gastrointestinal Diseases and Nutrition are co-sponsoring the 16th national Conference on Advances in Perinatal and Pediatric Nutrition from July 14 to 16. John Kerner, MD, director of pediatric nutrition at Packard Children's Hospital, will chair the program.

The conference is designed for nutritionists, nurses, obstetricians, neonatologists, pediatricians, pediatric gastroenterologists, pharmacists and other healthcare professionals involved in the care of high-risk pregnant mothers, premature infants and pediatric patients. Lectures, small-group workshops and question-and-answer sessions will address the nutritional requirements of these special-needs patients. Continuing education credits are available.

Topics will include:

- Pediatric obesity
- Breastfeeding the premature infant
- Diabetes in pregnancy and children
- Nutrition and neonatal respiratory disease
- DHA and arachidonic acid in premature and term infants

For more information or to register for the program, visit [www.symposiamedicus.org](http://www.symposiamedicus.org) or call 1-800-327-3161.



## PUBLICATIONS AND FACULTY UPDATES

### CENTER FOR ADVANCED PEDIATRIC EDUCATION OFFERS NEW COURSES

The Center for Advanced Pediatric Education (CAPE) at Lucile Packard Children's Hospital offers simulation-based training programs in neonatal resuscitation, neonatal transport, team training and ECMO emergencies in a full-scale, fully-stocked replica of a delivery or operating room.

Since the opening of CAPE's new, dedicated training space near Packard Children's Hospital in November, medical professionals from throughout the world, as well as a host of neonatologists from the hospital itself, have taken advantage of CAPE's unique training opportunities. The neonatal resuscitation course offers an alternative to the traditional NRP recertification course, and participants completing any of the simulation-based training programs garner CME credits.

In addition to previously existing topics, CAPE faculty have designed a new course in pediatric advanced life support and are working to develop an expanded obstetrical course, which will include maternal advanced cardiac life support, neonatal resuscitation and fetal monitor interpretation scenarios. The center also recently hosted a team of medical professionals from Sweden intent on establishing their own pediatric and obstetric medical simulator at Sodertjukhuset Hospital in Stockholm.

Upcoming CAPE courses:

- Pediatric Advanced Life Support: July 20
- PediSim Course: July 20, Oct. 21 and 22
- SimTrans Course: July 23, Sept. 10, Oct. 15
- NeoSim Course: Sept. 8 and 9, Oct. 13 and 14
- OBSim Course: Oct. 7
- FetalSim Course: Oct. 9
- ECMOSim Course: Oct. 23
- Perinatal Counselling: July 18; Aug. 8, 15, 22 and 29

To learn more about CAPE, visit <http://cape.lpch.org> or contact Mary Coyle, CAPE coordinator, at [mcoyle@stanford.edu](mailto:mcoyle@stanford.edu) or 650-724-5307.

### PUBLICATIONS

Classification and definition of disorders causing hypertonia in childhood. Sanger, Delgado, Gaebler-Spira, Hallett, Mink; Task Force on Childhood Motor Disorders. *Pediatrics* 2003 Jan;111(1):e89-97

Abnormal coupling of knee and hip moments during maximal exertions in persons with cerebral palsy. Thelen, Riewald, Asakawa, Sanger, Delp. *Muscle & Nerve* 2003 Apr;27(4):486-93

The role of the pediatrician in extended breastfeeding of the preterm infant. Morton. *Pediatric Annals* 2003 May;32(5):308-16

Breastfeeding the premature infant. Morton. *Pediatric Annals* 2003 May;32(5):290-1

Electrical resynchronization: a novel therapy for the failing right ventricle. Dubin, Feinstein, Reddy, Hanley, Van Hare, Rosenthal. *Circulation* 2003 May 13;107(18):2287-9

Phototherapy use in jaundiced newborns in a large managed care organization: do clinicians adhere to the guideline? Atkinson, Escobar, Takayama, Newman. *Pediatrics* 2003 May;111(5 Pt 1):e555-61

Follow-up of children of depressed mothers exposed or not exposed to antidepressant drugs during pregnancy. Casper, Fleisher, Lee-Ancajas, Gilles, Gaylor, DeBattista, Hoyme. *Journal of Pediatrics* 2003 Apr;142(4):402-8

Evaluation and development of potentially better practices to prevent chronic lung disease and reduce lung injury in neonates. Sharek, Baker, Litman, Kaempf, Burch, Schwarz, Sun, Payne. *Pediatrics* 2003 Apr;111(4 Pt 2):e426-31

The need for long-term audiologic follow-up of neonatal intensive care unit (NICU) graduates. Yoon, Price, Gallagher, Fleisher, Messner. *International Journal of Pediatric Otorhinolaryngology* 2003 Apr;67(4):353-7

### FACULTY UPDATES

**JANE MORTON, MD**, has been elected to the Executive Committee of the Section on Breastfeeding of the American Academy of Pediatrics. Morton's three-year appointment will begin in November 2003.

Morton is the director of breastfeeding medicine at Lucile Packard Children's Hospital—a unique effort to increase rates of breastfeeding in term and premature infants delivered at the hospital's Johnson Center and its satellite nurseries. The endeavor requires bridging obstetric and pediatric care, pre- and post-natal care and maternal and infant care.

Morton was recently recruited from the Palo Alto Medical Foundation. Her plans for the hospital's Breastfeeding Medicine Program were highlighted in the Spring 2003 issue of Physician Update.

### PEDIATRIC CLINICAL UPDATE IN SAN RAMON

Packard Children's Hospital is sponsoring a Pediatric Clinical Update symposium on Sept. 20 at the San Ramon Valley Conference Center. The program begins at 11:30 am with a lunch with faculty and will end with a networking reception from 5:30 to 6:30 pm. Participating Packard physicians will include:

- **CRAIG ALBANESE, MD**; chief of pediatric surgery
- **SETH AMMERMAN, MD**; adolescent medicine specialist
- **LORRY FRANKEL, MD**; chief of pediatric intensive care
- **JANE MORTON, MD**; director of breastfeeding medicine
- **DARIUS MOSHFEGHI, MD**; specialist in vitreoretinal surgery
- **DON OLSON, MD**; director of the pediatric epilepsy program

CME credits are available. For more information or to register for the symposium, call Lisa Lamparski at 650-497-8554.

# LUCILE PACKARD CHILDREN'S HOSPITAL

## IMPORTANT CONTACT INFORMATION

### Physician Hotline for Referral & Consultation

24-hour, immediate referral and consultation

Tel. 800-995-5724

Fax. 650-843-0136

referral@medcenter.stanford.edu

### Critical Care Consultation & Transport

24-hour, immediate consultation for neonatal, pediatric and maternal critical care and transport issues

650-723-7342

### Hospital Page Operator

24-hour access

650-497-8000



**Lucile Packard Children's Hospital**

STANFORD UNIVERSITY MEDICAL CENTER

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Physician Update is published as part of an ongoing effort to serve the needs of physicians who refer to Lucile Packard Children's Hospital at Stanford. To share comments or secure more information, contact:

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## OTHER CONTACTS FOR REFERRING PHYSICIANS

### Admissions

800-995-5724 / 650-497-8221

### Continuing Medical Education

650-497-8554

### Diagnostic Imaging

650-497-8376

### Radiologist Consult

650-497-8466

### Grand Rounds

650-723-5168

### Health Plan Services

650-736-1067

### Medical Group Services

650-736-1067

### Medical Staff Services

650-497-8566

### Professional Services Billing for Physicians

650-498-5785

## PHYSICIAN REFERRAL LIAISON SERVICE

Providing assistance and information to referring physicians and their staff.

Monday–Friday 8 am–5 pm

Tel. 800-756-5000

Fax. 650-320-9443

referral@medcenter.stanford.edu

## CME COURSES

### 11th Annual Pediatric Update

July 18–19, 2003

Lucile Packard Children's Hospital at Stanford

### Pediatric Clinical Update

Sept. 20, 2003

San Ramon Valley Conference Center,

San Ramon, CA

### New Development In the Management of Eating Disorders in Children and Adolescents

Jan. 23, 2004

Lucile Packard Children's Hospital at Stanford

### For More Information

650-497-8554 or visit [cme.lpch.org](http://cme.lpch.org)

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