



## BREAKTHROUGH ROBOTIC SURGERY

### LPCH SURGEONS PERFORM WORLD'S FIRST ROBOTICALLY-ASSISTED KASAI PROCEDURE

Robotic surgery offers many well-known advantages over traditional or even laparoscopic procedures. Last fall, Lucile Packard Children's Hospital began utilizing the da Vinci surgical robot to perform pediatric surgeries.

In early January, pediatric surgeons Craig Albanese, MD, and Thomas Krummel, MD, made history with the seven-foot-tall, three-armed surgical robot when they used it to correct biliary atresia in a 2-month-old infant. Although Packard Children's Hospital's da Vinci had lent an arm or three in one other pediatric surgery, the January operation marked the first time in the world the robot had been used to perform this particular technique, called the Kasai procedure.

"We're changing the culture of surgery," said Albanese, chief of pediatric surgery. "Usually we have our hands in there, feeling and doing. Even with the more recent laparoscopic techniques, we were still right at the patient's bedside. Now we're taking several steps away to sit at a remote console."



Surgical robot assists **Craig Albanese, MD**, chief of pediatric surgery, and **Tom Krummel, MD**, LPCH's surgeon-in-chief, in the correction of a case of biliary atresia.

The console, which looks somewhat like an overgrown version of a child's Viewmaster sporting hand grips and foot pedals, sits against the wall of the operating room about 10 feet from the patient. During the landmark surgery Albanese, a professor of surgery at the School of Medicine, manipulated the surgical instruments from the console while Packard Children's Hospital's surgeon-in-chief and fellow surgery professor Krummel assisted at the bedside.

Biliary atresia affects about 300 infants each year in this country. Without prompt surgical treatment, the resulting rapid inflammation and destruction of the duct that delivers bile from the liver to the small intestine leads to the accumulation of bile in the liver. Untreated infants exhibit severe jaundice within about three weeks of birth, followed by irreversible organ damage and death.

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## BREAKTHROUGH ROBOTIC SURGERY

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**CRAIG ALBANESE, MD**  
Chief of Pediatric Surgery

### ADVANTAGES OF ROBOTIC SURGERY

Like laparoscopic procedures, the surgery was performed with minimally invasive techniques that required only five small incisions in the child's abdomen. Although they minimize pain and speed recovery, such small entry points cause unavoidable technical problems: Surgery must be viewed in two dimensions on a monitor above the patient, the surgeon can't control the

surgical instruments and the camera simultaneously, and the instruments' range of motion can't match those of the human arm, wrist and hand.

In contrast, the da Vinci console treats the surgeon to a three-dimensional view of the ongoing surgery and gives him or her total control of two instruments and a camera. Hand and foot movements are translated into the steady, precise and unrestricted movement of the robot's arms, which hold specialized surgical instruments scaled down for use in children. Other members of the team view the action on a monitor perched next to the operating table.

Albanese is no stranger to minimal access surgery—he is the president of the International Pediatric Endosurgery Group. His years of experience help him to appreciate another, equally important benefit of robotic surgery.

“It's incredibly comfortable,” said Albanese. “Surgery can be tiresome and ergonomically uncomfortable. With the robot, I can place my head in a comfortable viewing box and rest my arms on a cushioned armrest. Then I go about moving my hands and arms just like I would in a traditional surgery.”

A microphone connected to a speaker near the bedside monitor amplifies the surgeon's voice for the other members of the surgical team, instructing them when to swap instruments, commenting on the procedure or conferring with the surgeon at the bedside.

The robot's lack of some human characteristics can also be an advantage.

“The robot filters out any hand tremor, and it scales motion,” said Albanese. “I can move my hands five centimeters, and the instrument moves only one. This allows more sweeping motions and increases the comfort and precision of the surgery. The range of motion is also much greater than with laparoscopic instruments.”

The da Vinci<sup>®</sup> Surgical System is manufactured by Intuitive Surgical, Inc.

**For more information** about pediatric surgery at Packard Children's Hospital, visit [www.surgery.lpch.org](http://www.surgery.lpch.org) or call 650-723-6439.

## RESEARCHERS LAND \$7 MILLION GRANT TO STUDY ROOT CAUSES OF ASTHMA, ALLERGIES

MULTIDISCIPLINARY EFFORT WILL FOCUS ON THE TIM FAMILY OF GENES

Stanford School of Medicine and Lucile Packard Children's Hospital researchers have received a \$7 million five-year program project grant to continue their studies of the molecular causes of asthma and allergies.

“Our previous studies identified a new family of genes called TIMs important in the regulation of immune responses, particularly in the development of asthma,” said the grant's principal investigator Dale Umetsu, MD, PhD.

“The grant will enable us to expand our investigation of the role of these genes in a mouse model of asthma by using knock-out or transgenic approaches. This grant will also allow

us to continue our studies in humans to understand how TIM-1 functions as an asthma susceptibility gene and to understand the relationship between hepatitis A infection and the TIM-1 molecule.”

Earlier epidemiological studies by Umetsu and his colleagues recently published in *Nature* showed that infection with the hepatitis A virus could protect people with a specific version of TIM-1 from developing asthma. The researchers found that in T cells and liver cells, TIM-1 serves as a cell-surface receptor for the virus, giving it the foothold necessary for infection.

“Now we're also trying to understand what other immune system molecules

bind to the TIM molecule on T cells,” said Umetsu, a professor of pediatrics at the School of Medicine and chief of the division of allergy and immunology at Lucile Packard Children's Hospital. “This will help us understand how the TIMs function in normal immune interactions.”

Other Stanford and Packard Children's Hospital researchers participating in the grant include Rosemarie DeKruyff, PhD, professor of pediatrics; Neil Risch, PhD, professor of genetics; and Marco Conti, MD, professor of obstetrics and gynecology. Gordon Freeman, PhD, of the Dana Farber Cancer Institute is a co-principal investigator.



# LPCH PHYSICIANS DISCUSS INFLUENZA VACCINE, HUMAN AVIAN FLU CASES

ASK SICK PATIENTS ABOUT TRAVEL TO SOUTHEAST ASIA, CONTACT WITH POULTRY



**KATHLEEN GUTIERREZ, MD,** LPCH pediatrician specializing in infectious diseases in children.



**DAVID LEWIS, MD,** associate professor of pediatrics (immunology and transplantation biology) at Stanford University School of Medicine

Despite last winter’s seemingly severe flu season, the influenza vaccine is regarded by many parents as an unnecessary and inconvenient intrusion. In order to reap the full benefits, children younger than nine years old need two doses one month apart the first year they receive the vaccine, and the newly available inhaled version of the vaccine is not approved for use in children under five.

Pediatric infectious disease specialists David Lewis, MD, and Kathleen Gutierrez, MD, recently discussed the immunological basics of influenza infection and vaccination, the human

cases of avian flu that have recently occurred in Vietnam and Thailand, and the potential benefits of universal vaccination at pediatric grand rounds.

In “Influenza: Can we meet the new challenges,” Gutierrez, a pediatric infectious disease expert and an assistant professor of pediatrics in Stanford’s School of Medicine, recommended that pediatricians remain alert to the possibility of human cases of avian flu occurring in children or adults who have recently traveled from Southeast Asia, and urged them to remember to ask about potential contact with poultry or poultry droppings.

She also discussed the unusual features of this year’s human influenza A viral epidemic, which began, peaked, and ended earlier than is typical. Because one of the influenza A strains used for both the injected and inhaled trivalent influenza vaccines was not well matched with the primary disease-causing strain, neither of these vaccines was optimally effective in providing protection this past influenza season.

Lewis, an associate professor of pediatrics at the medical school, discussed how the immune system normally eliminates influenza A from the body. He then reviewed the potential benefits of universal vaccination against influenza. Benefits of universal vaccination include limiting dangerous medical complications in children and reducing the likelihood that infected children—who shed the virus at higher levels and for longer than adults—will spread the disease to others vulnerable members of the community, such as the elderly.

It is also possible that repeated priming of the immune system with known strains of influenza may provide at least partial protection against subsequently arising pandemic strains. The development of more potent influenza vaccines than are currently used might provide substantially more protection from such pandemics. Finally, recent research by Lewis’s laboratory using a mouse model suggests that infection with influenza A may predispose to the subsequent development of asthma and allergic disease, providing yet another potential benefit to universal influenza vaccination.

## POTENTIAL BENEFITS OF UNIVERSAL INFLUENZA VACCINATION:

- Decreased likelihood that children, who shed the virus at higher levels and for a longer time than adults, will infect other vulnerable members of the community, such as the elderly.
- Repeated priming of the immune system with known strains of influenza may at least partially protect against subsequent pandemic strains.
- Recent research using a mouse model suggests that influenza A infection may predispose to the subsequent development of allergies and asthma.

**For more information** about the infectious diseases and immunodeficiency program at Packard Children’s Hospital, visit [id.lpch.org](http://id.lpch.org) or call 650-723-5682.

## BERNARD DANNENBERG, MD

NEW DIRECTOR OF PEDIATRIC EMERGENCY MEDICINE WILL BRING LPCH STYLE TO EMERGENCY DEPARTMENT



**BERNARD DANNENBERG, MD**  
New Director of Pediatric  
Emergency Medicine

The emergency room can be a scary place for a sick young child. Lucile Packard Children's Hospital and Stanford Hospital, which share emergency staff and facilities, are working to change that feeling. New construction will soon provide a separate Packard-style, child-friendly waiting room stocked with toys, games and videos and an additional seven examination rooms designed and decorated with children in mind.

"We know that treating children can be different from treating adults," said Bernard Dannenberg, MD. "Children

who need emergency care are often frightened, and their families are stressed. There's lots of anxiety. Creating a child-friendly environment that eases their fears will allow us to better treat these patients."

Dannenberg, who arrived at Stanford on Feb. 2, is Packard Children's Hospital's first Davies Family Endowed Director of Pediatric Emergency Medicine. He has the rare distinction of completing two medical residencies: pediatric medicine and emergency medicine. Dannenberg is board-certified in pediatrics, emergency medicine and pediatric emergency medicine. He most recently served as assistant professor of emergency medicine and residency director of pediatric emergency medicine at Loma Linda University Medical Center in Los Angeles.

Last year the emergency room served about 10,000 children, and the number is expected to grow. Dannenberg's arrival and the planned construction reflect Packard Hospital's commitment to developing a pediatric emergency program within Stanford Hospital's emergency department.

"Many of the current emergency room faculty love to see kids, and will continue to do so," said Robert Norris, MD,

Stanford Hospital emergency medicine chief and associate professor of surgery. "Everybody that works in the emergency department has pediatric expertise and experience, but we now want to focus on some of the unique needs of children." Other pediatric specialists will soon join the effort.

"A pediatric nurse educator is already on board, and soon we will be adding two pediatric emergency medicine specialists, a pediatric social worker and a child life specialist. We are creating an atmosphere that is physically and emotionally comforting for children," said Dannenberg.

"All of us who work in emergency medicine are thrilled about what this means for kids and their families," said Norris. "This new department will also enable us to advance the research and teaching of pediatric emergency medicine through training programs and fellowships."

"It's very exciting to be leading such an important project," said Dannenberg. "Packard and Stanford's emergency services already provide world-class care, but now we're creating a brand-new standard for the children in our community."

## RESEARCH ON NEW USES FOR METFORMIN BEGINS AT LPCH DIABETES DRUG MAY BENEFIT OBESE ADOLESCENTS

Obese but otherwise healthy adolescents may benefit from a drug commonly used to treat type 2 diabetes, say Lucile Packard Children's Hospital researchers. The researchers have begun a two-year randomized trial to test whether metformin can help overweight teens shed unhealthy excess pounds.

"There is some evidence that metformin causes weight loss in children with type 2 diabetes," says Packard Children's Hospital pediatric endocrinologist and the study's principal investigator Darrell Wilson, MD. "Now we're trying it in obese children without the disease."

The study, sponsored by the Glaser Pediatric Research Network, will be conducted at five sites across the country. To be eligible, adolescents between 13 and 17 years old must have a body mass index exceeding the 95th percentile for their age and gender.

Non-diabetic volunteers will be randomized into one of two groups, one of which will receive metformin for one year and the other, placebo. Both groups will attend regular diet and exercise education classes. During the second year, metformin will be discontinued and researchers will follow the weight loss or gain in each group.

The researchers are planning to enroll 15 patients at each site. Participants will receive some financial support to defray travel expenses incurred during 11 visits to Packard Children's Hospital. In addition to undergoing physical exams and answering questions about health and diet, participants will be asked to wear an activity monitor for five five-day stretches.

**For more information** about the study, call 650-724-7123 or 650-724-7119 or visit [www.med.stanford.edu/dped/](http://www.med.stanford.edu/dped/).



## CRYOABLATION: NEW, GENTLER TECHNIQUE TO TREAT PEDIATRIC CARDIAC ARRHYTHMIAS



**ANN DUBIN, MD**  
Pediatric Cardiologist at LPCH

Pediatric cardiac arrhythmias vary in severity from troublesome to incapacitating. Some can be relieved by using radiofrequency energy to burn away the tissue responsible for the abnormal conduction pattern. But faulty pathways that originate dangerously near the atrioventricular node or the pulmonary vein remain off limits to this type of treatment, because it could disrupt the heart's normal pattern or cause scarring that limits blood flow into the heart.

New technology at Lucile Packard Children's Hospital now provides many children suffering from these difficult-to-treat arrhythmias with an alternative to medication or pacemakers.

### PACKARD CHILDREN'S HOSPITAL'S ARRHYTHMIA SERVICE/ECG LABORATORY: CLINICAL SERVICES

Pediatric cardiologists at the arrhythmia center can

- Diagnose, monitor and manage arrhythmias
- Perform electrophysiologic studies
- Provide ECG services, Holter and event recording, pacemaker and ICD management
- Conduct tilt table testing
- Ablate arrhythmias

"It's a gentler, kinder way of getting rid of abnormal conduction pathways," says pediatric cardiologist Anne Dubin, MD.

Recently Dubin became the first physician on the West Coast to use the new therapy, called cryoablation, to ablate an arrhythmia in a child. Cryoablation relies on extreme cold rather than heat to destroy tissue.

A key feature of cryoablation is the technique's reversibility—physicians can toggle the cooling energy on and off while measuring the heart's response. If the normal conduction pathway is threatened, re-warming the tissue can restore normal rhythm. In contrast, tissue burned by radiofrequency waves cannot be rescued.

"The real advantage of this is for those who have pathways that are located close to the normal conduction system that we would not have previously gone after due to the threat of burning normal tissue," says Dubin. "Instead we have turned to medication, which may or may not work. With cryoablation, we can turn on the energy and assess the effect before it becomes permanent."

One of the first four children that Dubin and her colleague George Van Hare, MD, director of Packard Children's Hospital's pediatric arrhythmia center, treated with cryoablation would previously have been forced to rely on medication.

"The pathway was in a spot that would have given heart block had we tried radiofrequency energy," says Dubin. "We have four other children with pathways too close to the AV node for traditional ablation. These kids are now coming back for cryoablation."

It is also possible that freezing the tissue, rather than burning it, may result in less scarring over time, reducing the chance of interfering with normal heart function. Freezing can also reach deeper tissue, which often makes it a good choice for adults with ventricles thickened abnormally by congenital heart disease.

Like radiofrequency ablation, cryoablation is performed in the cardiac catheterization laboratory at Packard Children's Hospital as an outpatient procedure. Children are usually back on their feet within a couple of days. Dubin estimates that as many as 25 to 50 percent of the 135 children who come to the hospital each year for electrophysiological studies or arrhythmia ablation could benefit from the new technology, which has only recently become available in this country.

"There are some instances where radiofrequency ablation is better or safer for technical reasons," says Dubin. "For instance, radiofrequency is better for lesions on the left side of the heart, far away from any possibility of heart block."

Cryoablation is safe even for very young children, although normally a child must be at least 3 years old to be considered for the procedure. Very severely affected infants may also be candidates. The pediatric arrhythmia center has an initial success rate of about a 96 percent regardless of the type of ablation procedure used. Patients with returning arrhythmias can often be successfully treated by a second procedure.

Cardiac arrhythmias affect about one in 10,000 children. Symptoms can include chest pain, stomach pain, rapid heartbeat and breathlessness in the absence of exercise, and fainting.

**For more information** about cardiology services at Packard Children's Hospital, visit [www.ecg.lpch.org](http://www.ecg.lpch.org), [www.cathangio.lpch.org](http://www.cathangio.lpch.org) or [www.cardiology.lpch.org](http://www.cardiology.lpch.org). To speak with someone in the arrhythmia service, call 650-497-8677. For pediatric cardiology, call 650-723-7913, and for the cardiac catheterization lab, call 650-723-7676.

## LPCH INVESTS \$1 MILLION IN COMMUNITY HEALTH CENTERS AND PROGRAMS



A \$1 million investment by Lucile Packard Children's Hospital will allow the Ravenswood Family Health Center in East Palo Alto to fund an additional pediatrician, a pediatric social worker and an adolescent physician for the next three years.

The investment—intended to increase access to primary medical services for children and expectant mothers—will also ensure continuity of services at the MayView Community Health Center clinics in Palo Alto and Mountain View and allow 200 more children to enroll in the Healthy Kids health care insurance programs in Santa Clara and San Mateo counties.

“These community health programs are committed to providing health care for some of our most underserved populations,” said Christopher Dawes, president and CEO of Packard Children's Hospital. “We have a close working relationship with these agencies. These funds will ensure their services for those who need them most.”

Investing in community health continues the ongoing mission of Packard Children's Hospital to support the health-care needs of children,

adolescents and expectant mothers. Though this \$1 million investment is the first of its type the hospital has made, Packard Children's Hospital provided over \$48 million in uncompensated medical care and community service programs in Northern California in fiscal year 2003.

“This gift from Lucile Packard Children's Hospital is deeply appreciated by the Ravenswood Family Health Center,” said Larry Bruguera, MD, medical director at Ravenswood. “It will

enable us to care for a greater number of underserved children and in a more comprehensive fashion.”

Margaret Taylor, director of the Department of Health Services in San Mateo County, added, “This is a very generous contribution to our Healthy Kids program. Lucile Packard Children's Hospital continues to play a leadership role in improving the health status of our children.”

“A gift of this type is further demonstration of the magnificent partnership we have enjoyed with Lucile Packard Children's Hospital. Clearly, we share the same objectives and commitment to the children of our community,” said Leona Butler, CEO of the Santa Clara Family Health Plan.

Candace Roney, executive director of community services at Packard Children's Hospital, set the context of the investment.

“With rising medical costs and the state budget crisis, many community health organizations are suffering at a time when even more residents need their services,” she said. “The health care safety net is badly frayed. This investment reflects our commitment to ensuring that high-quality health care remains available to underserved residents in our community.”

### PEDIATRIC SURGERY CLINIC OPENING IN SAN JOSE

Children in the South Bay who need surgical consultation can now be seen at Lucile Packard Children's Hospital's new pediatric surgical clinic in San Jose. Located at 14651 South Bascom Avenue, Suite 150, the clinic will be staffed on alternate Mondays by Packard Children's Hospital pediatric surgeons from 9:00 am to 11:30 am. Appointments at the new clinic can be made through the surgery scheduling office at 650-724-4168.



## PUBLICATIONS AND FACULTY UPDATES

### 12<sup>TH</sup> ANNUAL PEDIATRIC UPDATE JULY 16 AND 17, 2004

The 12th Annual Pediatric Update is scheduled for July 16th and 17th, 2004. Presented by the department of pediatrics and Lucile Packard Children's Hospital, the conference will be held at the Arrillaga Alumni Center on the Stanford campus. The Update will highlight the most recent advances and issues in pediatrics by combining lectures, seminars, case studies, workshops and question-and-answer sessions. A 'Meet-the-Professor' lunch will allow participants to interact with presenters in small group settings.

Topics will include, among others: substance abuse, stomach pain, pediatric palliative care, diabetes, eating disorders, conscious sedation, dermatology, cochlear implants, sports injuries, primary immune deficiencies and vaccines. Participants can also learn skills in performing pediatric sports examinations, neonatal intubations, cardiology physical examinations and interpreting the CBC.

A limited number of participants can sign up for an additional simulation-based course addressing office emergencies for the general pediatrician. PediSim will be held on July 15th and 18th and involves active participation in challenging medical scenarios.

For more information about the 12th Annual Pediatric Update or to download a course brochure, visit [www.cme.lpch.org](http://www.cme.lpch.org) or call 650-497-8554. For more information about the PediSim course, visit [cape.lpch.org](http://cape.lpch.org) or call 650-724-5307.

### PUBLICATIONS

Use of the Cygnus GlucoWatch biographer at a diabetes camp. Gandrud, Paguntalan, Van Wyhe, Kunselman, Leptien, Wilson, Eastman, Buckingham. *Pediatrics* 2004 Jan;113(1 Pt 1):108-11

Pregnancy, sleep disordered breathing and treatment with nasal continuous positive airway pressure. Guillemainault, Kreutzer, Chang. *Sleep Medicine* 2004 Jan;5(1):43-51

Viral-induced T helper type 1 responses enhance allergic disease by effects on lung dendritic cells. Dahl, Dabbagh, Liggitt, Kim, Lewis. *Nature Immunology* 2004 Mar;5(3):337-43. Epub 2004 Feb 15

Persistent and selective deficiency of CD4+ T cell immunity to cytomegalovirus in immunocompetent young children. Tu, Chen, Sharp, Dekker, Manganello, Tongson, Maecker, Holmes, Wang, Kemble, Adler, Arvin, Lewis. *Journal of Immunology* 2004 Mar 1;172(5):3260-7

Use of the Pediatric Symptom Checklist in a low-income, Mexican American population. Jutte, Burgos, Mendoza, Ford, Huffman. *Archives of Pediatric and Adolescent Medicine* 2003 Dec;157(12):1169-76

White matter structure in autism: preliminary evidence from diffusion tensor imaging. Barnea-Goraly, Kwon, Menon, Eliez, Lotspeich, Reiss. *Biological Psychiatry* 2004 Feb 1;55(3):323-6

Novel therapies in pediatric rheumatic diseases. Chira and Sandborg. *Current Opinion in Pediatrics* 2003 Dec;15(6):579-85

A typology of non-adherence in pediatric renal transplant recipients. Shaw, Palmer, Blasey, Sarwal. *Pediatric Transplantation* 2003 Dec;7(6):489-93

Safety and trough concentrations of nevirapine prophylaxis given daily, twice weekly, or weekly in breast-feeding infants from birth to 6 months. Shetty, Coovadia, Mirochnick, Maldonado, Mofenson, Eshleman, Fleming, Emel, George, Katzenstein, Wells, Maponga, Mwatha, Jones, Abdool Karim, Bassett; HIVNET 023 Study Team. *Journal of Acquired Immune Deficiency Syndromes* 2003 Dec 15;34(5):482-90

Pregnancy, sleep disordered breathing and treatment with nasal continuous positive airway pressure. Guillemainault, Kreutzer, Chang. *Sleep Medicine* 2004 Jan;5(1):43-51

### FACULTY UPDATE

**David K. Stevenson, MD**, Harold K. Faber Professor of Pediatrics, Senior Associate Dean for Academic Affairs, Director of the Charles B. and Ann L. Johnson Center for Pregnancy and Newborn Services, and Chief of the Division of Neonatal and Developmental Medicine, has been elected as Vice President/President Elect of the American Pediatric Society (APS) for 2004-2005. Stevenson will assume the role of President of the APS in 2005-2006. The American Pediatric Society, founded in 1888, is the oldest pediatric research society in the United States.

**William E. Benitz, MD**, professor of pediatrics at Lucile Packard Children's Hospital, was named the first Philip Sunshine, MD, Professor of Neonatology. Benitz, a clinical investigator in neonatology, is known for his work on early markers for disease in newborns and the evaluation and prevention of neonatal Group B streptococcal infection.

A graduate of Stanford School of Medicine, class of 1978, Benitz served as a resident in pediatrics, then chief resident and later as a postdoctoral fellow in the division of neonatal and developmental medicine, all at Stanford. Benitz joined the faculty in 1985 and became professor in 1999. He is the director of the Packard Children's Hospital nursery system and associate chief of the division of neonatal and developmental medicine at the medical school.

The professorship, established in November through a gift from the Lucile Packard Foundation for Children's Health, honors pediatrics professor emeritus Sunshine for his work in neonatology and his accomplishments as a clinician, scientist and teacher.

# LUCILE PACKARD CHILDREN'S HOSPITAL

## IMPORTANT CONTACT INFORMATION

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24-hour, immediate referral and consultation

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Fax. 650-843-0136

referral@medcenter.stanford.edu

### Critical Care Consultation & Transport

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650-723-7342

### Hospital Page Operator

24-hour access

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## CME COURSES

### Pediatric Pain Management for the Pediatrician and Family Practitioner

May 8, 2004

Lucile Packard Children's Hospital at Stanford

### Pediatric Clinical Update

May 22, 2004

The Cliffs Resort, Pismo Beach, CA

### 12th Annual Pediatric Update

July 16–17, 2004

Frances C. Arrillaga Alumni Center, Stanford Campus

### Pediatric Otolaryngology Update—2004

Nov. 6–7, 2004

The Ritz-Carlton, San Francisco, CA

### For More Information

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

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AT STANFORD



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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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