

# Pediatric

SPRING 2008

## DISASTER PREPAREDNESS

Pediatric Disaster  
Resource and Training Center



ChildrensHospitalLosAngeles  
International Leader in Pediatrics

## Project Overview

WITH FUNDING from the U.S. Department of Health and Human Services, Childrens Hospital Los Angeles, together with the Los Angeles Emergency Medical Services Agency, has established the Pediatric Disaster Resource and Training Center (PDRTC) under the direction of Jeffrey Upperman, MD, principal investigator and director of Trauma at Childrens Hospital Los Angeles. Its mission is to identify and address gaps in pediatric disaster resources, communication and training, so that health-care providers throughout LA County are prepared to handle emergency medical needs of the region's 2.8 million children.

### TEAM LEADERS

#### ▶ Administrative Core—

Henri Ford, MD, Core Medical Director, Cynde Herman, PhD, Core Director, and Bridget Berg, MPH, Operations Manager

#### ▶ Disaster Resource Center Core—

Nancy Blake, MN, CCRN, and Kathleen Stevenson, RN, BSN, Core Directors

#### ▶ Drill Evaluation Core—

Jeffrey Upperman, MD, Core Director

#### ▶ Education & Training Core—

Alan Nager, MD, and Solomon Behar, MD, Core Directors

#### ▶ Informatics Core—

Robert Neches, PhD, Core Director

#### ▶ Virtual Pediatric Disaster Care Core—

Randall Wetzel, MB, BS, Core Director

#### ▶ Los Angeles Emergency

Medical Services Agency—

Roel Amara, RN, and Millicent Wilson, MD, Project Representatives

### CORE UPDATES

#### Drill Evaluation Core

This core has assembled After-Action Report Evaluations from drills conducted prior to the grant time period and analyzed results. A regional pediatric disaster drill is being

planned, including a team of observers, for the evaluation of this event. The evaluation to determine Disaster Resource Center pediatric capabilities and vulnerabilities has been modeled and initial contacts made for this evaluative process.

#### Education & Training Core

Research of optimal pediatric disaster preparedness training methods for health-care workers is complete. Data has been collected and analyzed, and results have been submitted to the *American Journal of Disaster Medicine*. A draft of the pediatric disaster competency tool, based on pediatric disaster educational competencies, has been completed. The tool now will be finalized based on input from internal and external stakeholders. The pediatric disaster curriculum development committee has defined specific skills and outlined what is required in each area of competency.

#### Virtual Pediatric Disaster Care Core

The telemedicine robots have been purchased and service contracts are in place. An assessment of areas in the county needing a virtual link to Childrens Hospital Los Angeles for care of pediatric patients during a disaster has been completed and potential sites to deploy the robots have been identified.

#### Administrative Core

The "Admin" Core is planning the Pediatric Disaster Preparedness "Olympix." The objective is to demonstrate the challenges presented by a pediatric disaster event and also to raise awareness of our current level of readiness. As part of the "My Preparation Campaign," the "Admin" core is assisting with the disaster preparation survey of all



PDRTC Team and Steering Committee

Childrens Hospital Los Angeles staff, which will provide data needed to prepare the institution to support the caregivers after the disaster event.

#### Informatics Core

See details on page 2 of this issue.

#### Disaster Resource Center Core

See details on page 3 of this issue.

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Office of the Assistant Secretary for Preparedness and Response (ASPR)  
[www.hhs.gov/aspr](http://www.hhs.gov/aspr)

# Core

IN THIS SECTION, WE FOCUS ON THE WORK OF TWO OF THE CORE

In the confusion following a large earthquake or other major disaster, the lives of children will depend on getting the latest, best information about resources and needs into the hands of decision makers—quickly, accurately and flexibly—in a form that enables them to make the right moves.

The **Informatics Core** is focused on building the software technology needed to support just this kind of rapid decision making in a pediatric disaster setting. The goal is to create and disseminate software that enables health-care facilities to develop, maintain and apply pediatric disaster response plans based on best practices principles.

Robert Neches, PhD, director of the Informatics Core, and his team are working to adapt to emergency pediatrics the

*“ Systems that can help decision makers make accurate calls, under heavy time pressure, in crisis situations, are a maturing, but already useful technology. We think the time has come to put this technology to use to save children’s lives in pediatric emergencies. ”*

—Dr. Robert Neches

lessons learned from software that he built for the armed forces. This work utilizes technology originally developed to help Marine Corps Air Groups quickly and effectively plan flight operations and optimize logistical support for missions, based on the most current information.

The Informatics Core Team has made significant strides toward the creation of the first module of the Pediatric Emergency Disaster Support System (PEDSS) software. As a model, the PEDSS software will set up a best practices data base that can be accessed both by the machine modeling system and by individual human users, quickly offering accurate and timely suggestions. An initial version of the user interface and logic elements has been completed and is currently under review by the PDRTC’s committee of subject matter experts.

As director of the Distributed and Scalable Systems Division at the University of Southern California’s (USC) Information Sciences Institute (ISI), and as a research faculty member of USC’s Computer Science Department, Dr. Neches is ranked among the top one percent of most-frequently cited computer science authors. His work involves the creation of advanced computer technologies that help people plan and take action in complex, uncertain situations. At ISI, Dr. Neches has positioned his division to focus on the critical technological opportunities of the next decade—widely disseminated, highly distributed computing in a highly connected world. For more information on the USC/ISI Distributed Scalable Systems Division: [www.isi.edu/divisions/division2/](http://www.isi.edu/divisions/division2/).



Informatics Core Team (left to right) Robert Neches, PhD, (Core Director) Tatiana Kichkaylo, PhD, Tanya Ryutov, PhD, and Carolina Quinteros

# FOCUS

DISASTER  
RESOURCE  
CENTER CORE

ORE GROUPS. IN THE NEXT NEWSLETTERS, WE'LL FOCUS ON THE OTHERS.

Adequate stockpiles of pediatric-appropriate supplies and equipment are a critical component to disaster preparedness, and so, under the direction of co-leaders Kathleen Stevenson, RN, BSN, and Nancy Blake, MN, CCRN, the **Disaster Resource Center (DRC Core)** has launched a comprehensive assessment of pediatric supplies at all DRCs and also at 64 of the largest hospitals in Los Angeles County. When complete, the data will become part of a regional pediatric supplies database.

The DRC has taken the lead on an array of additional factors equally important to ensuring hospital preparedness for a pediatric disaster or surge event. For example, the DRC conducted a Pandemic Influenza Tabletop in December 2007 that addressed communica-

tion, coordination, roles and responsibilities and training issues. Building on lessons learned from that exercise, an additional Tabletop was conducted in March 2008. Results of both Tabletops will be synthesized into published recommendations. These two Tabletops are additional deliverables that were not part of the original grant, but have been identified by the DRC as a significant component of the project.

The DRC also coordinated the first regional Pediatric Reunification Conference. This two-day conference attracted attendees from all the major hospitals, DRCs and emergency medical service agencies in Los Angeles County. Also in attendance were Mark Brandenburg, MD, from the University of Oklahoma, and Andy Garrett, MD, from the National Center for Disaster Preparedness at Columbia University.



**Kathy Stevenson, RN, BSN (left) and Nancy Blake, MN, CCRN**

Kathy Stevenson is the Disaster Resource Center manager and a house supervisor at Childrens Hospital Los Angeles. She has been a pediatric nurse for 25 years and has been involved in emergency preparedness for more than 15 years. She has participated in disaster training and conferences lecturing on mass decontamination, chemical/biological/radiological bioterrorism, surge capacity, the Hospital Incident Command System, pediatric preparedness in a disaster, pandemic flu and health-care facility disaster preparedness. She also served on the Executive Review Committee for the California Department of Public Health "Standards and Guidelines for Healthcare Surge During Emergencies" project.

Nancy Blake is the director of Critical Care Services and Education at Childrens Hospital Los Angeles. Her 15-year career at Childrens Hospital includes serving as director of Critical Care and Medical Surgical Services, nurse manager of PICU/ED and legal nurse consultant. She received a Leadership Excellence Award in 2006 from the Association of California Nurse Leaders, and was twice nominated for the *Nurseweek* magazine Nurse Excellence Award. She was on the board of directors of the American Association of Critical Care Nurses from 2003-2006. She also participated in the National Consensus Conference in Pediatric Disaster Preparedness in 2003.

## PERSONAL VIEWPOINT

Having lived through the Northridge earthquake that seriously damaged the infrastructure of her hometown of Santa Clarita and destroyed the homes of family and friends, DRC co-leader Kathy Stevenson knows the value of disaster preparedness. In addition to stocking supplies of food and water, she stresses the importance of a plan to communicate with family members.

**"There is a need to know that everyone is safe. It's easier to deal with the devastation of material things, if you know where everyone in your family is, and that no one has suffered any serious injury."**

In addition, she credits her family's strong relationships with their neighbors as a critical aspect of disaster preparedness.

**"We talked about disasters with our neighbors, maybe not formally, but we each had an idea of who had the generator, who had the tarps and who had the outdoor cooking equipment. By pooling our supplies and working together, we helped each other through the lack of power, the devastation and the terrible emotional toll."**

### THE AMERICAN RED CROSS RECOMMENDS INCLUDING YOUR NEIGHBORS IN YOUR DISASTER PLANNING.

"Working with neighbors can save lives and property. Meet with your neighbors to plan how the neighborhood could work together after a disaster until help arrives. Know your neighbors' special skills (e.g., medical, technical) and consider how you could help neighbors who have special needs, such as disabled and elderly persons. Make plans for child care in case parents can't get home." From: [www.redcross.org](http://www.redcross.org)

# Disaster Planning for Your Family

DISASTER CAN STRIKE quickly and without warning. What would you do if basic services—water, gas, electricity or telephones—were cut off? Relief workers will be on the scene after a disaster, but they cannot reach everyone right away.

## 1. Create a Disaster Plan

▶ Meet with your family and discuss why you need to prepare for disaster. Discuss the types of disasters that are most likely to happen. Explain what to do in each case.

▶ Pick two places to meet:

1. Right outside your home in case of a sudden emergency, like a fire.
2. Outside your neighborhood in case you can't return home.

▶ Ask an out-of-state friend to be your “family contact.” After a disaster, it's often easier to call long distance.

▶ Discuss what to do in an evacuation. Plan how to take care of your pets.

▶ Find out about the disaster plans at your workplace, your children's school or day care center and other places where your family spends time.

## 2. Complete This Checklist

▶ Post emergency telephone numbers by

phones (fire, police, ambulance, etc.).

▶ Teach children how and when to call 911 or local Emergency Medical Services number.

▶ Show each family member how and when to turn off the utilities at the main switches.

▶ Check if you have adequate insurance coverage.

▶ Get training from the fire department for each family member on how to use the fire extinguisher (ABC type), and show them where it's kept.

▶ Install smoke detectors on each level of your home, especially near bedrooms.

▶ Stock emergency supplies.

▶ Determine the best escape routes from your home. Find two ways out of each room.

▶ Find the safe spots in your home for each type of disaster

▶ Conduct a Home Hazard Hunt.

## 3. Practice your plan

▶ Test your smoke detectors monthly and change the batteries at least once a year.

▶ Quiz your kids every six months so they remember what to do.

▶ Conduct fire and emergency evacuation drills.

▶ Replace stored water every three months and stored food every six months.

## HOME HAZARD HUNT

- ▶ In a disaster, ordinary items in the home can cause injury and damage. Anything that can move, fall, break or cause a fire is a potential hazard.
- ▶ Repair defective electrical wiring and leaky gas connections.
- ▶ Fasten shelves securely.
- ▶ Place large, heavy objects on lower shelves.
- ▶ Hang pictures and mirrors away from beds.
- ▶ Brace overhead light fixtures.
- ▶ Secure water heater. Strap to wall studs.
- ▶ Repair cracks in ceilings or foundations.
- ▶ Store weed killers, pesticides and flammable products away from heat sources.
- ▶ Place oily polishing rags or waste in covered metal cans.
- ▶ Clean and repair chimneys, flue pipes, vent connectors and gas vents.

▶ Test and recharge your fire extinguisher(s) according to manufacturer's instructions.

*Taken from “Family Disaster Plan” developed by the Federal Emergency Management Agency and the American Red Cross. For more information: [www.redcross.org](http://www.redcross.org)*

## THE DOCTOR IS IN

Expanding upon his telemedicine work in pediatric intensive care, Dr. Randall Wetzel's current work with telemedicine robots is designed to extend the physician's reach to remote geographic areas, where access to pediatric expertise may be limited. Ultimately, the system will facilitate communications for rapid assessment and triage in the event of a catastrophic disaster. Robots have been purchased and potential sites for deployment have been identified. The focus now is on planning for utilization of the robots.

Randall Wetzel, MB, BS, is a professor of pediatrics (in intensive care medicine) and anesthesiology, Keck School of Medicine of the University of Southern California and chair of Anesthesiology Critical Care Medicine at Childrens Hospital Los Angeles. He also is the founder and director of the national Virtual Pediatric Intensive Care Unit organization.



Dr. Randall Wetzel and the telemedicine robot

# Spotlight on the ADMINISTRATION CORE

The “Admin” Core is tasked with providing logistical support for individual core groups and tracking overall project progress. Team members include:



**Henri Ford, MD**  
*Core Medical Director*

Dr. Ford, as the vice president and surgeon-in-chief, provides medical and administrative leadership for the Administrative Core work.



**Cynde Herman, PhD**  
*Core Director*

Dr. Herman serves in an advisory leadership role to the Admin Core and as a consultant to all core teams. Dr. Herman’s expertise is in health-care leadership, organizational development and process/performance improvement.



**Bridget Berg, MPH**  
*Operations Manager*

Bridget is responsible for oversight of the daily operation of the Administrative Core, which supports all the core work of the grant. She has responsibility for ensuring that the entire project proceeds according to schedule and within budget. Bridget’s expertise in

project management has been essential to the success of this grant.



**Nellie Nuñez**  
*Administrative Coordinator*

Nellie is responsible for daily operations of the Admin Core, including scheduling, coordinating meeting agendas and compiling meeting minutes. Currently, Nellie is managing the logistics for the My Preparation Campaign and the Pandemic Tabletop. Nellie is studying journalism at Los Angeles Community College. One of her short stories was recently published as part of a LACC anthology.



**Burgandy Kohout**  
*Administrative Coordinator*

Burgandy supports the Education and Training Core. Currently, she’s assisting Drs. Alan Nager and Solomon Behar to arrange best practices data into a pediatric disaster preparedness curriculum manual. Her work on the PDRTC project has kindled a desire to become more involved with pediatric issues;

and so, Burgandy is planning to volunteer at Childrens Hospital Los Angeles—either by reading to children or by helping out in the Child Development Center.



**Travon Marshall**  
*Administrative Assistant*

Travon is the newest member of the Admin Core Team, arriving at Childrens Hospital Los Angeles only a few weeks ago. Travon fills the much-needed role of Admin Core “runner.” He assists all Admin Core team members and facilitates, as needed, all projects.



**Abbie Castiglione**  
*Project Coordinator*

Abbie facilitates planning for the Pediatric Disaster and Emergency Services National Summit. She also is responsible for coordinating the logistics for this conference, which will be held in September and will feature experts in pediatric disaster planning and response from across the nation. Abbie also will support the evacuation drill.



## A Minute with Jeffrey Upperman, MD, FAAP, FACS

As we near the half-way point of the Pediatric Disaster Resource and Training Center project, now is the time for project leaders to step up, push through roadblocks and move toward accomplishment of our objectives.

Now, some of you might be thinking, “Well, he’s not talking about me; I’m not the leader. I’m only the assistant, or the coordinator, or just a temporary hire.” Others of you might think, “I’m just helping out, this isn’t my real job. He can’t possibly be speaking about me.”

Yet, leadership knows no levels or job titles. We are all leaders and we must all be responsible. A leader understands the objective and does what needs to be done to accomplish that objective. No matter what your particular role or assignment, you are an important part of

our team, and successful completion of your specific task, or set of tasks, is crucial to the success of the entire project.

In the coming months, as more and more deliverables come due, the level of activity will increase substantially and despite our best planning, roadblocks will continue to pop up unexpectedly and block our path. Yet, our mission is clear.

Together, we are creating a pediatric disaster resource that will serve as the foundation for effective pediatric disaster planning, training and response in L.A. County, and become the standard to be modeled across the nation.

Now is the time for leaders to step up and do what needs to be done;

Now is the time for all of us to step up and do what needs to be done;

Now is the time...

# Save the Dates

## PEDIATRIC REUNIFICATION CONFERENCE

June 23–25, 2008  
Los Angeles Marriott Downtown

## EMERGENCY PREPAREDNESS AND DISASTER PLANNING FOR CHILDREN WITH SPECIAL HEALTH-CARE NEEDS

April 14, 2008  
The California Endowment  
1000 N. Alameda Street  
Los Angeles

## PEDIATRIC DISASTER PREPAREDNESS

“Olympix” Training Exercise  
May 22, 2008  
Childrens Hospital Los Angeles

## REGIONAL PEDIATRIC DISASTER DRILL

Date and Location TBD

## PEDIATRIC DISASTER & EMERGENCY SERVICES NATIONAL SUMMIT

September 11–12, 2008  
Los Angeles Marriott Downtown

“If we wait until the need arises, it will  
be too late. Now is the time.”

*Jeffrey S. Upperman, MD*

*Director, Pediatric Disaster Preparedness Project*

*Childrens Hospital Los Angeles*

### **Pediatric Disaster Resource and Training Center**



### **ChildrensHospitalLosAngeles**

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