

# FUNDAMENTALS

## of Pediatric Anesthesiology 2011

*Pediatric Anesthesiology for the Generalist*

**April 2 - 3, 2011**

Sheraton San Diego Hotel and Marina • San Diego, CA

**SPONSORED BY THE SOCIETY FOR PEDIATRIC ANESTHESIA**



The Society for Pediatric Anesthesia is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The Society for Pediatric Anesthesia designates this educational activity for a maximum of 7.5 *AMA PRA Category 1 Credit(s)*<sup>™</sup>. Physicians should only claim credit commensurate with the extent of their participation in the activity.

The program has been approved by the American Association of Nurse Anesthetists for 11 CE credits; Code Number 33620; Expiration Date 4/3/2011.

# Welcome



**Paul J. Samuels, MD**  
Fundamentals of Pediatric  
Anesthesiology 2011  
Program Chair

**W**e invite you to participate in the Society for Pediatric Anesthesiology's Third Annual "Fundamentals of Pediatric Anesthesiology". This course will take place in beautiful San Diego on the weekend of April 2-3, 2011, in parallel with the Society's Winter meeting.

"The Fundamentals" was created by the SPA to address the educational needs of anesthesiologists, CRNA's, and others working where most pediatric surgery takes place: the community hospital. This unique program will focus on practitioners in general hospitals who wish to enhance their understanding of pediatric anesthesia, and the care they provide to their youngest patients.

By holding The Fundamentals in conjunction with the SPA Winter meeting we will bring together a

broad range of participants with the specialty's best-known speakers and educators. While registration to the Fundamentals course is separate from that of the SPA Winter meeting, attendants will have full access to the workshops and refresher courses available at the general SPA meeting - including an offering in Pediatric Simulation.

This year's program continues our commitment to examine the most current challenges in pediatric anesthesiology. We will open with a group of lectures concentrating on the first year of life, including sessions on Developmental Physiology; Anesthetic Implications of the Pre-mature and Ex-Premature Infant; and Common GI Surgery: Pyloric Stenosis and Inguinal Hernias. The second session will explore some of the complexities of pediatric anesthesia care, including Pre-operative Anxiety, Premedication, and Parental Presence; Tonsillectomies and Obstructive Sleep Apnea; The Child with a Murmur; and Pediatric Syndromes. A luncheon discussion of pediatric cases will follow. In this informal session, difficult cases presented by the audience will be discussed and analyzed by a diverse group of moderators from both private and academic practices.

Sunday morning's program will begin with a selection of Problem-Based Learning Sessions with cases from the "real world", offering participants opportunities to discuss anesthetic management in a small group setting. The Fundamentals closes with lectures illustrating some of the current controversies in pediatric anesthesiology, including: Anesthesia and Neurotoxicity; Emergence Delirium; Legal and Ethical Issues in Pediatric Anesthesia; Advocating for Child Centered Peri-operative Care; and Pediatric Anesthesiology Boards - What does it mean to my practice and me?

This exciting review of pediatric peri-operative care is specifically designed for the community practitioner. The Fundamentals will be practical, engaging, and will change the way you practice medicine. I hope you join us in San Diego in April!

Paul Samuels, MD  
Program Chair

# Meeting Information

## Education Mission Statement

Fundamentals of Pediatric Anesthesiology will focus on topics of interest to the community anesthesiologist who cares for children in his or her practice. The goals of the meeting are to provide the attendees with the core knowledge necessary to provide care to children undergoing routine procedures in everyday practice.

## Scope and Type of Activities

The program brings together experts from academic and private practices to review important clinical concepts, new discoveries, and changing practices in pediatric anesthesiology. Topics include anesthesia for the child in the first year of life, as well as an exploration of some of the complexities and controversies in pediatric peri-operative care. We will utilize a variety of educational formats, including lectures, panel discussions, small group discussions, and hands-on workshops. We strive to create an informal and highly interactive educational environment.

## Target Audience

This program is designed for anesthesiologists, CRNA's, and other practitioners with an interest in pediatric peri-operative care in the community hospital.

## Accreditation & Designation

SPA/Fundamentals of Pediatric Anesthesiology Program: The Society for Pediatric Anesthesia is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The Society for Pediatric Anesthesia designates this educational activity for a maximum of *7.5 AMA PRA Category 1 Credit(s)*<sup>™</sup>. Physicians should only claim credit commensurate with the extent of their participation in the activity.

The program has been approved by the American Association of Nurse Anesthetists for 11 CE credits; Code Number 33620; Expiration Date 4/3/2011.

## Americans With Disabilities Act

The Society for Pediatric Anesthesia has fully complied with the legal requirements of the ADA and the rules and regulations thereof. If any participant in this educational activity is in need of accommodations, please contact SPA at (804) 282-9780 by March 1, 2010 in order to receive service.

# Fundamentals of Pediatric Anesthesiology 2011

## *Pediatric Anesthesiology for the Generalist*

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### SATURDAY, APRIL 2, 2011

7:00 - 7:45 am Continental Breakfast  
7:45 - 8:00 am Welcome

#### Session 1: Neonates and Anesthesia

Moderator: Valerie E. Armstead, MD, FAAP

8:00 - 8:30 am **Developmental physiology for the Anesthesiologist**  
*Tetsu Uejima, MD*

8:30 - 9:00 am **Prematurity and the Ex-Premature: Anesthetic Implications**  
*Shobha Malviya, MD, FAAP*

9:00 - 9:30 am **Common Infant GI Emergencies: Pyloric Stenosis and Inguinal Hernias: What do I need to know?**  
*Samuel Wald, MD*

9:30 - 9:45 am **Questions/Discussion**  
9:45 - 10:15 am **Break**

#### Session 2: Challenges in Pediatric Anesthesia

Moderator: Maurice S. Zwass, MD, FAAP

10:15 - 10:45 am **Pre-operative anxiety, Premedication and Parental Presence**  
*Anna Mary Varughese, MD, MPH*

10:45 - 11:15 am **Tonsillectomies and Obstructive Sleep Apnea**  
*Karen Brown, MD*

11:15 - 11:45 am **The child with a murmur: when should I worry?**  
*Susan R. Staudt, MD*

11:45 am - 12:15 pm **Pediatric Syndromes: Which ones are important?**  
*Anne M. Lynn, MD*

#### Session 3: Lunch

12:15 - 1:30 pm **Challenging cases from the Community**  
Discussion (course participants will be queried prior to SPA to solicit challenging cases, presented to an expert panel for open discussion with audience) Discussants: Mark A. Singleton, MD; Julie J. Niezgoda, MD; Arundathi M. Reddy, MBBS

#### Session 4

1:30 - 4:00 pm Pediatric Simulation or SPA Workshops/Refresher Courses

### SUNDAY, APRIL 3, 2011

#### Session 5: Breakfast PBLDs

7:30 - 8:30 am **CONCURRENT**

**Table #1: T&A Gone Wild! Diagnosis and Treatment of Postoperative Rhabdomyolysis.**  
*Melissa Brooks, MD and Daphne Pierre-Paul, MD*

**Table #2: A six week old with a 4-day history of vomiting is scheduled for a laparoscopic pyloromyotomy. Brother carries Dx of Duchenne Muscular Dystrophy.**  
*Thomas J. Mancuso, MD, FAAP and Jamie Cheung, MD*

**Table #3: A Case of Lightning striking the same place twice! – Two unrelated causes of profound cardiac arrest during central line placement in a child.**  
*Songyos Valairucha, MD and Susan T. Verghese, MD*

**Table #4: When your age-appropriate adolescent patient refuses surgery but mom urges you to proceed because she is a minor after all.**  
*Destiny Chau, MD and Raeford Brown, MD*

**Table #5: Circulatory Collapse in a Twelve Day Old Infant during Laparoscopic Pyloromyotomy.**  
*Susan P. Taylor, MD, MPH and George Hoffman, MD*

#### Session 6: Controversies in Pediatric Anesthesia

Moderator: Anita Honkanen, MD

8:30 - 9:00 am **Anesthesia and Neurotoxicity**  
*Andreas W. Loepke, MD, PhD, FAAP*

9:00 - 9:30 am **Emergence Delirium**  
*Jeffrey L. Galinkin, MD, FAAP*

9:30 - 10:00 am **Legal/Ethical issues in Pediatric Anesthesia**  
*David B. Waisel, MD*

10:00 - 10:15 am **Break**

10:15 - 10:45 am **Advocating for child centered peri-operative care**  
*Thomas J. Long, MD*

10:45 - 11:15 am **Pediatric Anesthesiology Boards: what does this mean to my practice and me?**  
*Francis X. McGowan, MD*

11:15 - 11:30 am **Questions and adjournment**

# Faculty

**Valerie E. Armstead, MD, FAAP**

St. Joseph's Regional Medical Center  
St. Joseph Children's Hospital  
Paterson, NJ

**Karen Brown, MD**

McGill University  
Montreal, Quebec, Canada

**Jeffrey L. Galinkin, MD, FAAP**

Denver Children's Hospital  
Denver, CO

**Anita Honkanen, MD**

Stanford University  
Stanford, CA

**Andreas W. Loepke, MD, PhD, FAAP**

Cincinnati Children's Hospital Medical Center  
Cincinnati, OH

**Thomas J. Long, MD, FAAP**

University of New Mexico  
Albuquerque, NM

**Anne M. Lynn, MD**

Seattle Children's Hospital  
Seattle, WA

**Shobha Malviya, MD, FAAP**

University of Michigan Health System  
Ann Arbor, MI

**Francis X. McGowan, MD**

Children's Hospital Boston  
Boston, MA

**Julie J. Niezgoda, MD**

Cleveland Clinic Foundation  
Cleveland, OH

**Arundathi M. Reddy, MBBS**

University of Kentucky  
Lexington, KY

**Mark A. Singleton, MD**

Stanford University School of Medicine  
Stanford, CA

**Susan R. Staudt, MD**

Children's Hospital of Wisconsin  
Milwaukee, WI

**Tetsu Uejima, MD**

Children's Memorial Hospital  
Chicago, IL

**Anna Mary Varughese, MD, MPH**

Cincinnati Children's Hospital Medical Center  
Cincinnati, OH

**Samuel Wald, MD**

University of California Los Angeles  
Medical Center  
Los Angeles, CA

**David B. Waisel, MD**

Children's Hospital Boston  
Boston, MA

**Maurice S. Zwass, MD, FAAP**

University of California San Francisco  
San Francisco, CA

# Objectives

## SESSION 1 – NEONATES AND ANESTHESIA

### Developmental physiology for the Anesthesiologist

1. Understand the essential cardiovascular, pulmonary, CNS, renal and hepatic physiological differences in children under one year of age
2. Recognize how these differences impact anesthesia care
3. Identify potential anesthetic problems and solutions in this patient population

### Prematurity and the Ex-Premature: Anesthetic Implications

1. Recognize the medical implications of prematurity, including chronic lung disease, neurodevelopmental disorders, and retinopathy of prematurity
2. Review apnea of prematurity and its significance to peri-operative care
3. Identify anesthetic approaches to these high-risk patients

### Common Infant GI Surgery: Pyloric Stenosis and Inguinal Hernias: What do I need to know?

1. Learn the necessary pre-operative optimization for infants in need of emergency abdominal surgery
2. Recognize the anesthesia considerations specific for pediatric physiologic changes during emergency surgery
3. Understand the common emergency gastro-intestinal surgeries in infants and the necessary peri-operative care of these patients.

## SESSION 2 – CHALLENGES IN PEDIATRIC ANESTHESIA

### Pre-operative anxiety, Premedication and Parental Presence

1. Review the commonly used premedication drugs, their doses, routes, and side effects
2. Understand which children could benefit from premedication
3. Recognize the pros and cons of parental presence during induction

### Tonsillectomies and Obstructive Sleep Apnea

1. Review the assessment of the child with obstructive sleep apnea.
2. Describe modifications in anesthesia management in children with OSA undergoing adenotonsillectomy.

### The child with a murmur: when should I worry?

1. Describe the incidence of pediatric murmurs and undiagnosed cardiac lesions
2. Examine the costs and benefits of a pre-operative cardiac work-up
3. Review the pediatric cardiovascular examination and the identification of features likely to indicate benign murmurs
4. Develop strategies to determine when to proceed with a case and when to postpone for further evaluation



### **Pediatric Syndromes: Which ones are important?**

1. Review the specific vulnerabilities of children with Down Syndrome
2. Describe several congenital syndromes associated with difficult airway management
3. Discover syndromes associated with congenital heart disease
4. Identify resources to review syndromic features of importance to anesthesia providers

### **SESSION 3 – LUNCH**

#### **Challenging Cases from the Community**

Upon completion of this panel discussion, the participant will understand the complexities of challenging cases and how to resolve these issues. *Discussion (Course participants will be queried prior to SPA to solicit challenging cases, presented to an expert panel for open discussion with audience)*

Discussants: Mark Singleton, Private Practice, Los Gatos; Julie Niezgodka, Cleveland Clinic; Aru Reddy, University of Kentucky; Paul Samuels, Cincinnati Children's Hospital

### **SESSION 5 – SUNDAY BREAKFAST PBLD'S**

## **SESSION 6 – CONTROVERSIES IN PEDIATRIC ANESTHESIA**

#### **Anesthesia and Neurotoxicity**

1. Understand the evidence for anesthetic neurotoxicity as demonstrated in animal studies
2. Discuss the neurodevelopmental context, proposed mechanisms, alternative treatments, and alleviating strategies as examined in preclinical studies
3. Become familiar with the emerging attempts of evaluating the effects of anesthetic or sedative exposure on long-term neurodevelopment in children
4. Recognize other confounding factors during peri-operative care with implications for neurodevelopmental outcome

#### **Emergence Delirium**

1. Understand the etiology of emergence agitation
2. Describe preventive strategies for emergence agitation
3. Identify treatment strategies for emergence agitation

#### **Legal/Ethical Issues in Pediatric Anesthesia**

1. State distinctions among informed consent and other ethical issues for different ages of pediatric patients
2. Recognize "traps" in ethical and legal issues in pediatric anesthesia
3. Articulate strategies to address and resolve ethical and legal issues in pediatric anesthesia

#### **Advocating for Child Centered Perioperative Care**

1. Define common differences in care delivery processes in the Community Hospital setting compared to a Children's Hospital
2. Identify the essential elements and meaning of perioperative "child-centered care"
3. Describe the common obstacles to implementing a safe peri-operative environment for children in a Community Hospital
4. Develop effective strategies to overcome these obstacles and bring beneficial change in your Community Hospital setting

#### **Pediatric Anesthesiology Boards: What does this mean to my practice and me?**

1. Describe the intent and processes underlying certification and subcertification in any medical specialty
2. Review the rationale for seeking subspecialty certification in pediatric anesthesiology
3. Articulate current understanding of how the process will work (e.g. eligibility, grandfathering, ABA issues, etc.)
4. Discuss the anticipated effects on different practitioners and practice types



# SPA Workshops & Refresher Courses

Space is limited. Please circle your first, second and third choices for each time slot.

First fee listed is through 3/1/2011 and second is after 3/1/2011

SATURDAY, April 2, 2011			
CHOICE	TIME	TITLE	FEE
1 • 2 • 3	1:30-4:30 pm	Advanced Ultrasound Guided Regional Anesthesia: Santhanam Suresh, MD, FAAP	\$200/\$250
1 • 2 • 3	1:30-4:30 pm	Simulation: Anita Honkanen, MD; Richard H. Blum, MD; Sharon Redd, MD; Ellen Wang, MD; Aruna Nathan, MD; Robbie Hales, MD; Harshad Gurnaney, MD; Douglas Thompson, MD; Michael Richards, MD; Andrew Pittaway, MD; Michael Chen, MD; Radhamangalam "RJ" Rammamurthi, MD, MBBS, FRCA; Rebacca Claire, MD; Manchula Navaratnam, BSc(Hons), MBChB,FRCA; Douglas R. Thompson, MD; Daniel Rubens, MBBS, FANZCA; Don Stephanian, Breanna York	\$60/\$75
1 • 2 • 3	1:30-3:30 pm	Integrating Acupuncture in Pediatric Peri-operative Care and Pain Medicine: Shu-Ming Wang, MD; Brenda Golianu, MD; Rosalie Tassone, MD, MPH	\$60/\$75
1 • 2 • 3	1:30-3:30 pm	TEE: James A. DiNardo, MD; Jochen D. Muehlschlegel, MD; Lauren J. Cornella, MD	\$60/\$75
1 • 2 • 3	1:30-3:30 pm	Pediatric Anesthesia Careers in Private Practice vs Academics: What is right for you?: Randall M. Clark, MD	\$60/\$75
1 • 2 • 3	1:30-3:30 pm	Effective Feedback in Anesthesia and Beyond: Sally Bitzer, MD; Ira Todd Cohen, MD, MEd; Jamie Schwartz, MD; Jessica George, MD	\$60/\$75
<b>REFRESHER COURSES</b> (You will not be registered for a Refresher Course if its time conflicts with your chosen workshops.)			
_____	1:30-2:30 pm	Updates on Cardiac Anesthesia: Chandra Ramamoorthy, MBBS, FRCA	No charge
_____	2:30-3:30 pm	Review of Neonatal Anesthetic Management: Charles M. Haberkern, MD, MPH	No charge
			<b>TOTAL DUE \$ _____</b>

Please submit this form with the Scientific Program Registration form on page 7.

Name (Please print): \_\_\_\_\_

## WHEN YOU REGISTER, PLEASE REMEMBER TO:

- Indicate your first, second and third choices of workshops. Space is limited.
- Include payment with your registration.
- Add your totals from the Workshop and Refresher Course Registration form to your grand total.
- Include a completed membership application if you'd like to become a new member. Available at [www.pedsanesthesia.org](http://www.pedsanesthesia.org).
- Send your registration before the early cut-off date to avoid late registration fees.
- Make travel arrangements, including hotel reservations at the headquarters hotel.\*

\* Making reservations at the headquarters hotel helps keep meeting costs and registration fees lower.

## HOTEL RESERVATIONS

Make your hotel reservations online at

**[www.pedsanesthesia.org/meetings](http://www.pedsanesthesia.org/meetings)**

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## Pediatric Anesthesiology for the Generalist

April 2 - 3, 2011 • Sheraton San Diego Hotel and Marina • San Diego, CA

### Registration Form

> REGISTER ONLINE AT WWW.PEDSANESTHESIA.ORG <

If paying by check, please make checks payable to SPA and mail to: 2209 Dickens Road, Richmond, VA 23230-2005

PLEASE PRINT OR TYPE

Name \_\_\_\_\_  
Last First MI

Preferred Mailing Address \_\_\_\_\_

City / State / Zip \_\_\_\_\_ Email Address \_\_\_\_\_

Office Phone \_\_\_\_\_ Home Phone \_\_\_\_\_ Fax # \_\_\_\_\_

Accompanying Person(s) Name(s) \_\_\_\_\_

	Through 3/1/2011	After 3/1/2011	
<input type="checkbox"/> Physician	\$400	\$500	= \$ _____
<input type="checkbox"/> Allied Health	\$225	\$325	= \$ _____
<input type="checkbox"/> Refresher Courses (Please select from page 6, and return that page with your selections. You will not be registered for a Refresher Course if its time conflicts with your chosen workshops.)			= N/C
<input type="checkbox"/> Workshops (Please enter the total amount from page 6, and return that page with your selections.)			= \$ _____
PBLDs (Check one) <input type="checkbox"/> PBLD #1 <input type="checkbox"/> PBLD #2 <input type="checkbox"/> PBLD #3 <input type="checkbox"/> PBLD #4 <input type="checkbox"/> PBLD #5			= N/C
<b>Fundamentals participants have the opportunity to register for SPA Workshops for an additional fee.</b>			<b>Meeting Total: = \$ _____</b>

Please complete registration form and send to:

SPA, 2209 Dickens Road, Richmond, VA 23230-2005 • Credit Card payments may be faxed to 804-282-0090\*

Personal Check  VISA  MasterCard  American Express  Discover

Card No \_\_\_\_\_ Exp. Date \_\_\_\_\_

Signature \_\_\_\_\_ Printed Name on Card \_\_\_\_\_

Refund Policy: For Workshops, Scientific Meeting and PBLD's, a full refund through 3/1/2011; 50% refund from 3/2 - 3/15/2011; no refunds after 3/15/2011. Refund will be determined by date **written** cancellation is received.

*\*If you are registering for SPA Workshops & Refresher courses, please be sure to fax page 6 with this registration form.*

**IF YOU DO NOT RECEIVE A CONFIRMATION LETTER FROM THE SPA WITHIN 30 DAYS OF SUBMITTING YOUR REGISTRATION, PLEASE CALL/EMAIL THE OFFICE TO CONFIRM THAT YOUR REGISTRATION MATERIAL HAS BEEN RECEIVED.**

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