At the end of August the AAP conducted the first Academy Leadership Forum (ALF) in Chicago. This was a somewhat monumental occasion in the life of the AAP. Previously the leadership of the AAP has included the chapter presidents and vice presidents and the chairs of committees and sections. Each group has previously held their own leadership forum. The leadership from the Section on Critical Care has previously attended the Council of Sections meeting usually held in March. The chapter leadership has traditionally met at the Chapter Forum in September prior to the National Conference & Exhibition (NCE). Much of the activity of the AAP springs forth from the Chapter Forum. As you know the chapters comprise the various geographic districts. The District Chairs make up the Board of Directors so the overall leadership of the AAP grows out of the chapter process.

There has been a chasm between chapters and committees and sections in the AAP and yet all are important for the work of the AAP. The AAP has acknowledged that chasm and has begun working to close it. Initially the leadership of the committees and sections started meeting together several years ago. This has proven to be a great success with better communication and understanding of each others goals and missions. There has been more Section input at the Board level with the Chairman of the Council of Sections being invited to Board meetings, although not a voting participant.

The ALF held this past month provided a bridge for this chasm to be closed even further. It was the first time all the leaders have come together. At first there was some discomfort as the processes of the Chapters and the Committees and Sections were melded. But as the meeting continued it was apparent that a lot of useful communication was occurring and the participants could see the improvements before our eyes. The best example occurred during the discussion of the chapter resolutions. Chapters and districts can put forth resolutions that are then voted on by the complete Chapter Forum. In the past these resolutions would then be sent to the appropriate Committee or Section for further comment and study, and finally presented to the Board. The Top Ten would be priorities for the Board to deal with. What occurred at the ALF last month was that during discussion of the resolution on the floor, there was immediate input from the appropriate committee or section. The information was very useful for the chapters and often resolutions would be withdrawn based on what input was available. That immediate input from all parties involved resulted in stronger and more appropriate resolutions that will now be cleaner as they are put forward to the Board of Directors. The Board members also were able to hear all the discussion, thus helping them in dealing with the resolutions in the future.

The bottom line to all this discussion is that it appears that the AAP has developed a new and better forum for its leadership to share ideas and goals. This is surely going to allow for development of better working relationships within the AAP between general pediatricians, academic pediatricians, and medical and surgical subspecialists. Children will only benefit if we all come together.

One continuing concern voiced by chapter leaders to section leaders was their desire to get more subspecialists involved at the local level. I personally am surprised to hear how few subspecialists join their local chapter. The chapters are for all of us. Often the feeling is that the local chapter does not care about or want to involve itself in subspecialty issues. That does not appear to be the case after speaking with several chapter presidents and district chairs. The chapter leadership was very interested in hearing about subspecialists concerns and they share many of the same concerns. They are just as worried as we are about the lack of subspecialists available and the bleakness of the
future numbers of subspecialists. They too suffer from poor Medicaid reimbursement and recognize that is a major limitation to access to care for our children. I would like to encourage all of you to join your local chapter. I am sure you will be welcomed. The chapter leadership wants subspecialty involvement and wants to know your concerns. There may be projects you can help with when critical care or subspecialty input is needed. Also your district leaders want your input and are continuing to seek ways to get more subspecialty input at the chapter and district level. Let your district chair know who you are and that you are available to help with issues that may be pertinent to critical care or subspecialty issues.

We have had a recent disappointment in our section. The Pediatric Critical Care Practice Management Course was planned to occur at the end of the Pediatric Critical Care Colloquium in New York. We had hoped for and budgeted for 100 participants. At our previous course given with the Colloquium we were limited to 100 participants and were turning people away so it was felt that 100 was a reasonable number to plan for. The budget was developed very tightly – basically no profit. We realized that ran a risk of being under budget. Unfortunately one month prior to the course we only had 37 registered and that number had not increased in a few weeks. It did not appear that we were going to come even close to our anticipated registration. Because of that our section stood to lose around $10,000. That was perceived by the leaders of the course to be too much of a loss and the course was cancelled. That was a very uncomfortable decision for the course leaders because of the inconvenience and disappointment of the registrants and speakers. But the monetary loss would have seriously hampered the Section’s other goals and projects. The Executive Committee will be “dissecting” this event at our fall meeting and will try to come up with answers as to why the course did not have better registration.

In closing this is my last newsletter as your Section chair. What an honor it has been for me to serve you all. I have enjoyed so much getting to work closely with several of you through the Executive Committee and many other projects. I have heard from many of you and trust me, if you volunteered for a project your name was sent to the project leader! We have been able to celebrate some great successes – the Pediatric Coding Course and the new CPT code for pediatric critical care. We still have challenges as with the Practice Management Course but the biggest challenge is to meet the needs of the membership. We look forward to new and upcoming projects particularly the lifelong learning project headed by Tim Timmons which is being designed to serve as the lifelong learning component for our subspecialty recertification.

I personally want to thank Sue Tellez for all the help and support she has been the last several years to me and to our section. I can always zip her an email with a question or request and magically it is answered! If she doesn’t know the answer, she scouts it out. She also keeps me on task and reminds me of my many commitments. But because of her, the work of the Section on Critical Care moves forward and does not languish in a pile on my desks. Thanks, Sue.

I wish you all continued success in your own practices. I hope you can let your section know what your needs are. Please let your leaders know if you are interested in any projects or even starting one of your own! Also get involved with your chapters and work on advancing subspecialty issues through that mechanism.

Happy trails!

Michele Moss, MD, FAAP

2004 Section on Critical Care Distinguished Career Award

Congratulations!

Bradley P. Fuhrman, MD

Dr Fuhrman graduated from NYU School of Medicine (1971), then pursued Residency, Cardiology and Neonatology Fellowships at the University of Minnesota. He directed their Pediatric ICU before relocating to Children’s Hospital of Pittsburgh (1985) and Children’s Hospital of Buffalo (1991). He has chaired the Pediatric Critical Care Sub-Board and served on Editorial Boards of the Journal of Pediatrics, Critical Care Medicine and Pediatric Critical Care Medicine. He and Jerry Zimmerman edit the textbook, Pediatric Critical Care. Dr Fuhrman is Professor of Pediatrics and Chief of Pediatric Critical Care at SUNY Buffalo, and Medical Staff President at Children’s Hospital of Buffalo.
Sunday, October 10, 2004

8:00 – 8:15 pm Continental Breakfast

Introduction and Welcome
James D. Fortenberry, MD

8:15 – 9:45 am Abstract Session I

Moderators: Alice Ackerman, MD, FAAP and Barry Markovitz, MD, MPH, FAAP

9:45 – 10:00 am Coffee Break and Poster Review

10:00 - 11:20 am Abstract Session II

Moderators: Michele Moss, MD, FAAP and Mary Lieh-Lai, MD, FAAP

11:20 - 11:50 am Presentation of Distinguished Career Award
Recipient: TBA

12:00 - 1:00 pm Lunch & SOCC Business Meeting

M. Michele Moss, MD, FAAP

1:00 - 4:30 pm “Patient Safety in the Pediatric ICU”

1:00 - 1:05 pm Introduction
Moderator: James Fortenberry, MD, FAAP

1:05 - 1:40 pm Patient Safety in the PICU: An Overview
Vicki Montgomery, MD, FAAP

1:40 - 2:10 pm The Cost of Patient Safety
Fiona Levy, MD, FAAP

2:10 - 2:40 pm The Impact of Information Technology on PICU Patient Safety
Matt Scanlon, MD, FAAP

2:40 - 2:50 pm Break

2:50 - 3:20 pm Disclosing Medical Errors: The Problem and Approaches
John Straumanis, MD, FAAP

3:20 - 3:50 pm The Impact of Physician and Nurse Workload on PICU Safety
Vicki Montgomery, MD, FAAP

3:50 - 4:30 pm Identifying and Responding to Safety Issues: Practical Experiences
John Straumanis, MD, FAAP; Fiona Levy, MD, FAAP and Matt Scanlon, MD, FAAP

4:30 - 4:45 pm Best Abstract/Physician-in-Training Awards Presentation

Monday, October 11, 2004

8:30 - 11:30 am “Intensive Care Issues in Organ Transplantation”

8:30 - 8:45 am Welcome and Introduction
James Fortenberry, MD, FAAP

8:45 - 9:15 am Transplant Immunology and Pharmacology: A Primer
Maite DeLaMorena, MD, FAAP

9:15 - 9:45 am What’s New in Pediatric BMT For the Intensivist?
Jeffrey Schmidt, MD, FAAP

9:45 - 10:00 am Coffee Break

10:00 - 10:45 am Mechanical Ventilation and Advanced Technology in BMT Patients with Respiratory Failure: Two Perspectives
Sam Shemie, MD and Jeffrey Schmidt, MD, FAAP

10:45 - 11:30 am The Intensivist as Organ Donor Specialist: Ethical and Practical Issues
Sam Shemie, MD
ORAL ABSTRACT PRESENTATIONS

1

RANDOMIZED CLINICAL TRIAL OF KETOROLAC AFTER CONGENITAL HEART SURGERY IN INFANTS AND CHILDREN
Anuja Gupta, Casey Daggett, Stacey Drant, Niurka Rivero1 and Alan Lewis. Pediatrics, Childrens Hospital Los Angeles, Los Angeles, CA and Pediatrics, UCLA Medical Center, Los Angeles, CA.

2

IMPACT OF NEW PEDIATRIC CRITICAL CARE CPT CODES IN AN ACADEMIC CRITICAL CARE DIVISION
Otwell D Timmons. Department of Pediatrics, Carolinas Medical Center, Charlotte, NC.

3

MICROALBUMINURIA LEVELS ARE CORRELATED WITH PELOD SCORES IN CRITICALLY ILL CHILDREN
Martin K Wakeham, Kari L Rajzer, Denise B Angst, Luis E Torero, and David G Jaimovich. Pediatrics, Hope Children’s Hospital, Oak Lawn, IL.

4

A RETROSPECTIVE COHORT STUDY OF PROGNOSTIC FACTORS ASSOCIATED WITH OUTCOME IN PEDIATRIC SEVERE SEPSIS: WHAT IS THE ROLE OF STEROIDS?
Barry P Markovitz, Denise M Goodman, R Scott Watson, David Bertoch, and Jerry Zimmerman. Anesthesiology & Pediatrics, Washington University School of Medicine, St. Louis, MO; Pediatrics, Northwestern University Feinberg School of Medicine, Chicago, IL; CRISMA (Clinical Research, Investigation, and Systems Modeling of Acute Illness) Laboratory & Critical Care Medicine, University of Pittsburgh, Pittsburgh, PA; Child Health Corporation of America, Shawnee Mission, KS and Pediatrics, University of Washington, Seattle, WA.

5

NITRIC OXIDE SYNTHASE (NOS) INHIBITION PREVENTS THE DECREASE IN ANGIOTENSIN CONVERTING ENZYME mRNA AND ACTIVITY BY ACTIVATED NEUTROPHILS IN BOVINE PULMONARY ARTERIAL ENDOTHELIAL CELLS (BPAEC)
Renuka Mehta, Connie Snead, Anthony L Pearson-Shaver, and John D Cataravas. Pediatrics, Medical College of Georgia, Augusta, GA and Vascular Biology, Medical College of Georgia, Augusta, GA.

6

FAMILY PRESENCE DURING PEDIATRIC RESUSCITATION: A NATIONAL SURVEY OF PREVALENCE AND ATTITUDES AMONG HEALTHCARE PROVIDERS
Katherine J Gold, Susan L Bratton, and Daniel W Gorenflo. Department of Family Medicine, University of Michigan, Ann Arbor, MI and Department of Pediatrics and Communicable Diseases, University of Michigan, Ann Arbor, MI.
ELIMINATION OF DANGEROUS ABBREVIATIONS IN THE PEDIATRIC AND NEONATAL INTENSIVE CARE UNITS
Susan H Schrock, Elora Hilmas, and John P Straumanis. Department of Pediatrics, University of Maryland, Baltimore, MD and Department of Pharmacy, University of Maryland, Baltimore.

PATTERNS OF MEDICATION USE AND ERRORS IN A PEDIATRIC INTENSIVE CARE UNIT
Ilyas Burny, Mary W Lieh-Lai, Ken Gaynor, and Ronald L Thomas. Pediatric Critical Care Medicine, Children’s Hospital of Michigan/Wayne State University, Detroit, MI.

POSTER ABSTRACT PRESENTATIONS

VITAMIN D DEFICIENT RICKETS PRESENTING AS CARDIOPULMONARY ARREST
Amanda M Brandow, Sheila J Hanson, and Larry Greenbaum. Department of Pediatrics, Children’s Hospital of Wisconsin, Milwaukee, WI; Department of Critical Care, Children’s Hospital of Wisconsin, Milwaukee, WI and Department of Nephrology, Children’s Hospital of Wisconsin, Milwaukee, WI.

A REDESIGNED AMBULANCE TROLLEY AS A MOBILE PEDIATRIC INTENSIVE CARE UNIT FOR INTERHOSPITAL TRANSPORT
Dirk RG Danschutter and Jose Ramet. Pediatrics, AZ VUB, Brussels, Belgium.

INFANTILE KAWASAKI DISEASE AND PERIPHERAL GANGRENE
Amy L Durall 1, John R Phillips 1, Martin E Weisse 1 and Charles J Mullett 1. 1 Pediatrics, West Virginia University, Morgantown, WV.

ONCE-DAILY CICLESONIDE DOES NOT CAUSE HPA-AXIS SUPPRESSION IN PEDIATRIC ASTHMA PATIENTS
John W Georgitis, Stanley Galant, Mark Lloyd, Sudeep Kundu, James E Fish, Donald Banerji, and Parvez Hamedani. Respiratory Trials PLLC, Kernersville, NC; Clinical Trials of Orange County, Orange County, CA and Aventis Pharmaceuticals, Inc, Bridgewater, NJ.
PEDIATRIC TRACHEOSTOMIES: EPIDEMIOLOGY AND DISPOSITION
Mona L McPherson, Barbara A Montagnino, Remi Hueckel, and Jeanine M Graf. Pediatrics, Texas Children’s Hospital, Houston, TX; Pediatrics, Baylor College of Medicine, Houston, TX; Pediatrics, Duke University Medical Center, Durham, NC and Center for Pediatric Health Services Research, Texas Children’s Hospital, Houston, TX.

AN UNUSUAL CASE OF HYPERNATREMIA: A DIAGNOSTIC CHALLENGE
Umakanth A Khatwa, Lin Lin Kin, and Gerard Prosper. Pediatrics, Lincoln Medical and Mental Health Center, Bronx, NY.

THE RELIABILITY AND VALIDITY OF PEDIATRIC SEDATION SCALE
Renuka Mehta, Jennifer L Waller, and Anthony L Pearson-Shaver. Pediatrics, Medical College of Georgia, Augusta, GA and Biostatistics, Medical College of Georgia, Augusta, GA.

THE RISK FACTORS FOR ACUTE RHABDOMYOLYSIS IN STATUS ASTHMATICUS
Renuka Mehta and Derek S Wheeler. Pediatrics, Medical College of Georgia, Augusta, GA.

HOME TRANSITION WITH A PEDIATRIC TRACHEOSTOMY: IMPEDIMENTS TO PARENTAL EDUCATION AND DISCHARGE
Barbara A Montagnino, Mona L McPherson, Remi Hueckel, and Jeanine M Graf. Pediatrics, Texas Children’s Hospital, Houston, TX; Pediatrics, Baylor College of Medicine, Houston, TX; Pediatrics, Duke University Medical Center, Durham, NC and Center for Pediatric Health Services Research, Texas Children’s Hospital, Houston, TX.

ATYPICAL KAWASAKI DISEASE PRESENTING WITH ACUTE RESPIRATORY DISTRESS SYNDROME (ARDS) AND SHOCK

MYOCARDIAL BRIDGE WITH EVIDENT CORONARY ISCHEMIA: SURGICAL MANAGEMENT AND FOLLOWUP

USE OF ACTIVATED PROTEIN C IN A PRETERM NEONATE WITH GROUP B STREPTOCOCCAL SEPSIS
Bradly Strohler, Neal Patel, Marek Grzeszczak, and Kevin Churchwell. Pediatrics, Vanderbilt Children’s Hospital, Nashville, TN.

THE USE OF NITRIC OXIDE IN A PEDIATRIC ONCOLOGY ICU
Robert F Tamburro, Jeffrey E Schmidt, and Surender Rajasekaran. Pediatric Critical Care Medicine, St Jude Children’s Research Hospital, Memphis, TN and Pediatric Critical Care Medicine, University of Tennessee Health Science Center, Memphis, TN.
Congress has introduced legislation that would eliminate a dedicated national program for emergency medical services for children and $20 million in funding. The legislation’s (H.R. 3999) main purpose is to reauthorize the federal trauma grant program. However, it includes a provision that eliminates the national Emergency Medical Services for Children (EMSC) program. The loss of this dedicated program for emergency services for children and millions in funding would be devastating to the children. It has taken 20 years for EMSC to grow from a $2 million to $20 million program and there are still significant projects left to complete. Many emergency departments and ambulances lack specialized equipment and supplies needed to care for children, and many emergency medical personnel still do not have the necessary education or training to provide quality pediatric emergency care. Without the national EMSC the emergency care of millions of children will suffer.

**Background:**

Created in 1984, EMSC is a fully authorized program that supports demonstration projects to expand and improve emergency medical services for children who need treatment for trauma or critical care. The EMSC program has been reauthorized 5 times since its creation, received $20 million in FY 2004 and is currently authorized through 2005. The President has requested level funding for the program in FY 2005. H.R. 3999, was drafted to reauthorize the federal trauma care grants program. However, as introduced, H.R. 3999 would eliminate the national EMSC program by striking section 1910 of Title XIX of the Public Health Service Act. Section 1910 is the authorizing language for EMSC - without that section in place, the national EMSC program will cease to exist. Although H.R. 3999 includes language to allow trauma care grant funds to be used to improve emergency medical services for children, history has made clear that unless EMSC has distinct and dedicated authority and support, children’s emergency medical needs will go unmet.

**Key Points:**

1. The national EMSC program is a program that is responsive to the nation’s needs. Examples of cutting-edge work underway with support from the program include projects to develop emergency educational and training programs for school officials and staff; design national, evidence-based quality measures for assessing care to children who have suffered serious injuries; and ensure that all state disaster plans address pediatric needs.

2. The national EMSC program and the federal trauma care grants program are complimentary – not competing, not collapsible. In addition to funding projects that ultimately improve systems of care, the national EMSC program supports a broad array of initiatives that improve basic knowledge about pediatric emergency medicine.

3. While much has been accomplished to improve children’s emergency medical services across the country, much remains to be done. Many emergency departments and ambulances still lack specialized equipment and supplies needed to care for children.

4. The elimination of the national EMSC program, and the co-opting of $20 million in EMSC funds into the $3 million trauma care grants program, is a step back for children. If children lose their dedicated resource and are forced to complete with adult populations, we know from experience that children will suffer.

5. We know from experience that without dedicated, separate authority for children’s emergency services, critically ill and injured children will not receive the care they need when they need it.

6. Children have unique physiological needs that must be addressed in all aspects of emergency care. From supplies and equipment, to therapeutics, to provider education and training, children’s unique needs must be addressed if they are to survive emergency situations.

7. The Institute of Medicine (IOM) started a study on the Future of Emergency Care in the USA, which includes an assessment of emergency medical services for children, as well as pre-hospital and emergency department care. Any proposed changes to the national EMSC program will benefit from the IOM’s study and should be considered only after this study is complete.

**Take Action:**

Contact your Representative today and urge them to save the national Emergency Medical Services for Children (EMSC) program. E-mail a letter directly to your Representative from the AAP’s Legislative Action Center, www.aap.org/moc; (member id required, use subscription label on back of AAP News) click on Federal Affairs, then Legislative Alerts and Issues, then click on “Save the National Emergency Services for Children Program” or use the sample letter and key points below to fax a letter using your own letterhead.

Having Trouble Logging In? If you are having trouble logging into the AAP Members Only Channel, find your representatives’ contact info at http://www.house.gov/writerep/. Draft your own letter from the key points or simply cut and paste the sample letter from below and send.

**Helpful Hints:**

- Personalizing your letter has the most impact on legislators.
- Give as much data as you can about how this will affect you, your patients and the people where you live.

For More Information: Contact Cynthia Pellegrini, Assistant Director, or Katy Grossman, Legislative Assistant, in the AAP Washington Office via E-mail (cppellegrini@aap.org or kgrossman@aap.org) or phone (800/336-5475).
I write today as a concerned constituent and pediatrician to urge you to save the national Emergency Medical Services for Children (EMSC) program.

For more than 20 years, the EMSC program has sought to improve the nation’s ability to care for critically ill and injured children. While much has been accomplished during this time, much work remains to be done. For example, while support from the EMSC program led to the creation of national guidelines on the care of children in emergency departments, recent data indicate that fewer than half of the nation’s emergency departments are approved for pediatric care, and only half have written inter-facility transfer agreements for critically ill and injured children. Similarly, while the EMSC program is backing development of a model pediatric component for state disaster plans, data reveal that only 13 states are working with EMSC to ensure their planning efforts meet the emergency medical needs of children following a disaster or terrorist event.

It is an unfortunate but well-known truth that without a distinct, separate authority for children’s emergency medical services, many critically ill and injured children will not receive the care they need when they need it. If children lose their dedicated resource, we know from experience that their prospects will suffer. I therefore urge you to save the national EMSC program by rejecting provisions in H.R. 3999 that would eliminate EMSC. Your continued commitment to this vital national program is needed if all children are to have an equal opportunity to survive a life threatening illness, injury or event.

Sincerely,

2004 Course on Neonatal and Pediatric Critical Care Transport Medicine and Section Program

OCTOBER 10-12, 2004
San Francisco, California

American Academy of Pediatrics (AAP) National Conference & Exhibition
Sponsored by the AAP Section on Transport Medicine

If you are a physician, nurse, respiratory therapist, paramedic, emergency medical technician or administrator of a transport team, please plan on being a part of the 2004 Course on Neonatal and Pediatric Critical Care Transport Medicine. The Course, held as part of the AAP National Conference & Exhibition (NCE), is scheduled for October 11 and 12, 2004, in San Francisco. By registering for the Course, attendees have access to all educational sessions and activities that are offered during the NCE, including the Section on Transport Medicine’s academic and scientific program that immediately precedes the Course on October 10.

Topics that will be covered during this year’s Course and Section program include: “Legal Aspects of Transport Medicine,” “The Referring Center’s Perspective,” “Transport Enigmas,” “Advances in Neonatal Transports,” “Septic Shock: News You Can Use,” “Survival Training for Transport Personnel,” “Family Presence During Transport,” and “Procedural Sedation and Analgesia for Pediatric Patients.” In addition, there will be an opportunity to hear abstract presentations and view posters on the latest neonatal and pediatric transport research.

For a nominal fee, attendees also have the chance to observe and participate in workshops at the Center for Advanced Pediatric Education (CAPE) at Lucile Packard Children’s Hospital at Stanford. CAPE employs leading edge simulation-based technology that enhances training in the pediatric sciences. This is a fabulous opportunity to experience challenging medical scenarios that could be found on transports of critically ill children.

The Course is an excellent venue to network with other transport teams around the world, share ideas, and learn more about the ever-growing specialty of transport medicine. We hope to see in the Bay Area in October!
I. MEDICATION ERRORS

1. A small bottle of propofol was mistaken as a small bottle of intralipids.

2. A patient received a syringe full of air IV through an automated power injector which was supposed to be injecting contrast media during a CT scan. Contrast media and air both appear “clear”, especially when the room is dark, and the syringe may be obscured by drapes, etc.

3. Verbal telephone orders: a physician reportedly called in an order for 5200 mcg per hour of fentanyl. Fortunately the pharmacist had questions regarding this large dose and called the physician himself to verify. The physician actually wanted fentanyl, 50 to 100 mcg per hour. When confirming telephone orders, always express the numbers as single digits, for example in this case, the read back would be five-two-zero-zero mcg per hour.

4. Don’t confuse NOVOLIN 70/30 (70% NPH, human insulin isophane suspension, 30% regular, human insulin) and the newer preparation NOVOLOG MIX 70/30 (70% insulin aspart protamine suspension, 30% insulin aspart). Numerous errors have been reported where patients experienced wide fluctuations in blood sugar after they received Novolin instead of NovoLog.

5. PCA pump programming errors: Bear with me on this one – it is a bit complicated - one patient died and one patient recovered (luckily) from this error. The physician ordered fentanyl by PCA 50 mcg/mL with a 10 mcg demand dose, a 6-minute lockout, and clinician boluses of 20 mcg (every 5 minutes x 3, repeat every 4 hours as needed). The nurse accidentally programmed 1 mcg/mL instead of the actual concentration of 50 mcg/mL. Then she programmed the demand dose as 0.10 mcg instead of 10 mcg, such that each demand dose delivered only 0.1 mL. Despite an actual concentration of 50 mcg/mL the patient received only half of the intended dose (0.1 mL of 50 mcg/mL or 5 mcg). The patient kept complaining of severe pain, at which point the nurse on the next shift decided to give the patient a 20 mcg bolus. She correctly programmed the bolus dose, but since the pump had been set incorrectly at 1 mcg/mL concentration, the patient received 20 mL of the 50 mcg/mL actual concentration or 1000 mcg. The patient was later found unresponsive, was resuscitated and treated in the ICU but died 3 days later. A similar incident occurred in another patient at the same hospital, but the pulse oximeter alarmed, the patient was found unresponsive with poor respiratory effort, and was then brought back to the OR for presumed post-op bleeding. The error was subsequently discovered. The patient recovered following an ICU stay.

6. One of the treatments for priapism is the intracavernous injection of an alpha-agonist - phenylephrine or epinephrine to produce vasoconstriction and reduce blood flow to the penis. The typical concentration used is 1:1,000,000 of epinephrine prepared by adding 1 mg (1:1000) epinephrine to a liter of normal saline. The urologist thought an epinephrine preparation of 1:1000 on the label meant that the epinephrine had been prediluted with 1000 mL of normal saline and proceeded to inject 4 mL (4 mg) of the solution into the penis of a 16 year old who had presented with priapism. The patient arrested and could not be resuscitated.

7. Infant TPN and insulin: a prescription was written for 1 unit of regular insulin in each 327 mL bag of TPN for a 1.3 kg infant. The pharmacy technician mistakenly added 100 units of insulin to the TPN which was then administered to the infant. The infant developed severe hypoglycemia (3 mg/dL) which was fortunately successfully treated.

II. WARNINGS

1. Balloon inflation ports of medical devices (Foley catheter, cuffed tracheostomy tube, cuffed endotracheal tube) – designed to meet ISO (International Organization for Standardization) to accommodate parenteral syringes which are used to inflate non-parenteral balloon cuffs. Medications have been mistakenly injected into the balloon inflation ports. In one case, hyperinflation of a tracheostomy tube cuff resulted in airway obstruction and respiratory arrest.

2. Before suturing a patient’s laceration, an ED physician accidentally injected a wound-cleansing agent (SHUR-CLENS – 20% poloxamer 188) into the skin, instead of Xylocaine MPF 1%. Both plastic ampules had been placed side by side during preparation for the procedure. Ampules look similar and lettering on both is difficult to read.

3. Never draw up oral medications (suspensions, other liquid preparations) in syringes used for parenteral injection. Use oral syringes instead. In preparation for MRI, chloral hydrate was drawn up in a parenteral syringe to administer to a patient who refused to take the medication from a medication cup. A second dose was subsequently needed. The physician called the nurse who drew up a second dose of chloral hydrate in a parenteral syringe. She left the syringe uncapped, without a needle, and
included the tear-off label from the unit-dose cup for reference. Despite all these “safeguards,” the physician proceeded to administer the chloral hydrate through the IV. The error was noted when the patient started screaming. The infusion was stopped, and the patient suffered no harm.

### III. MISCELLANEOUS

#### MEDWATCH

1. FDA and Arjo Inc notified healthcare professionals of a Class I recall of the Minerva Patient Lift (models ML-20 and ML-30), a battery operated lift designed for lifting and transport of patients. There are three mechanical problems for which the Minerva patient lift is currently being recalled. The first involves the hanger bar detaching from the lift resulting in the patient falling to the ground because of a missing spring washer. The second problem involves a bolt in the foot pedal assembly becoming loose which allows the foot pedal assembly to fall off of the lift. This results in the lift becoming unstable and the patient possibly falling. Thirdly, some units may have faulty actuator brackets on the mast assembly that can also cause the lift to become unstable.

2. FDA and Centocor revised the warnings and adverse reactions sections of the labeling for Remicade, indicated for the treatment of rheumatoid arthritis and Crohn’s disease. Cases of leukopenia, neutropenia and pancytopenia, some with fatal outcome, and cases of CNS manifestation of systemic vasculitis, were described in patients receiving Remicade. The adverse reactions section was updated to include neutropenia, pericardial effusion and systemic and cutaneous vasculitis.

3. Enoxaparin: FDA and Aventis Pharmaceuticals revised the clinical pharmacology, precautions, and dosage and administration sections of labeling, describing the need for a dosage adjustment for patients with severe renal impairment (creatinine clearance <30mL/min) who have increased exposure to enoxaparin. No specific dosage adjustment is required in patients with mild or moderate renal impairment and in low-weight patients. However, low-weight patients should be observed carefully for signs and symptoms of bleeding.

4. FDA and Nellcor/Tyco notified healthcare professionals of a Class I recall of the Shiley Tracheosoft XLT Extended Length Tracheostomy Tube and Cannula. This recall affects 73,355 disposable units that the firm has shipped to the U.S. and international customers over the last four years. The tracheostomy tube is secured in place through the tube’s hub and flange assembly with the use of a holder or neck strap. The outer cannula may separate from the hub and neck flange allowing the outer cannula to travel farther into the patient’s airway, leading to obstruction of the airway and subsequent lack of ventilation. Airway obstruction can lead to permanent neurological injury or death.

5. Neonates exposed to Effexor, other SNRIs (Serotonin and Norepinephrine Reuptake Inhibitors), or SSRIs (Selective Serotonin Reuptake Inhibitors), late in the third trimester of pregnancy have developed complications requiring prolonged hospitalization, respiratory support, and tube feeding. Such complications can arise immediately upon delivery.

6. FDA and McNeil alerted healthcare professionals that one manufacturing lot (Lot # JAM108, exp 1/06) of Children’s Motrin (ibuprofen) Grape Chewable Tablets may mistakenly contain Tylenol 8-Hour extended release (acetaminophen) Geltabs. Lot # JAM108 was distributed nationwide to wholesale and retail customers between February 5 and April 1, 2004. The bottles are labeled as containing 24 tablets. The Tylenol 8-Hour product provides an adult dose of acetaminophen, and use of this adult product could provide more than the recommended dose (overdose) for children.

**Source of Information: ISMP Newsletters**

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**Did you know that the first case of Ehlers-Danlos Syndrome was described in the New Testament?**

A passage states: “Joseph tied his ass to a tree and walked all the way to Jerusalem.”
The National Institute of Child Health and Human Development (NICHD) has funded the Pediatric Critical Care Scientist Development Program (PCCSDP) to foster the development of highly promising young faculty in pediatric critical care, into physician scientists. The PCCSDP Scholar and sponsoring institution must make a five-year commitment to the program, which consists of two phases. Phase I normally lasts 2 years and provides up to $75,000 salary support, as well as support for laboratory supplies, travel, and tuition support. Indirect expenses are limited to 8% of eligible direct expenses. During the remainder of the five-year program (Phase II), PCCSDP Scholars are supported by their institution, preferably with extramural funding such as K08 or K23 NIH awards. In exceptional cases, Phase I support may be extended for a third year, but Scholars are expected to apply for K or R award support during the second year of Phase I.

Eligible applicants must be faculty members who have completed pediatric critical care fellowship training. Normally, applicants will be within five years of completion of fellowship, as this program is focused on development of young faculty. Interested applicants who completed fellowship training more than five years prior to entering the PCCSDP should contact me to discuss eligibility before submitting an application.

Throughout the PCCSDP program, Scholars will have an oversight committee consisting of the PCCSDP Program Director and two additional members of the National Advisory Committee (NAC). This oversight committee will regularly monitor the progress of each Scholar, comparing the Scholar’s progress with the prospective research and development plan outlined in the application. The NAC will site visit institutions with Phase I PCCSDP Scholars on an annual basis, and the NICHD may conduct additional site visits to help monitor Scholar and mentor performance. The purpose of the NAC and site visits is aimed at assuring the success of every PCCSDP Scholar.

The initial funding period will begin in January 2005. Applications are due October 18, 2004. Applicants will be expected to attend the first Annual Retreat from November 11–14, 2004 where the applicants will be engaged in career mentoring and scientific exchange with members of the NAC and additional invited speakers. Committee members will interview each applicant during the retreat as part of the application process. Limited funding will be available to help offset the expense of travel to this retreat for prospective Scholars. Mentors are also invited, at institutional expense.

This program is similar to a K award, requiring a trainee to work under the guidance of a skilled research mentor. Basic or clinical research in any aspect of pediatric critical care (e.g. molecular biology of sepsis, trauma care, cardiac intensive care, etc.) is eligible. Applicants are encouraged to identify talented mentors in their own institution or at other institutions. For example, a candidate at Institution A might move to Institution B for Phase I training, and return to the original Institution A during Phase II. This will enable talented young faculty to secure exceptional scientific training outside their initial faculty appointment, with the anticipation and expectation of returning to the institution with new scientific skills. Prospective Scholars are encouraged to contact the Program Director for assistance in identifying research mentors outside their current institution. We understand that applicants may identify excellent mentors in their current institution, particularly in the first year of the PCCSDP, but in future years, applicants are encouraged to explore potential mentors outside their current institution if appropriate to their scientific development.

The PCCSDP is focused on extremely promising young faculty, and successful applicants will be protected from clinical and administrative responsibilities at least 75% of their time during Phase I. Phase II Scholars must be protected at least 50%, but continued 75% protection is preferred. Letters of support from the sponsoring and, when different, the mentoring institution, must indicate commitment to this protection for the Scholar.

This is a unique opportunity to develop tomorrow’s scientists who will improve the care of infants and children who require critical care.

For those interested in this program, please contact the Program Director, Dr Michael Dean at mike.dean@hsc.utah.edu

A. Background of Program

Pediatric critical care is a relatively new subspecialty, with initial subspecialty board designation and fellowship program certification occurring in the late 1980’s. Pediatric critical care is high risk and time consuming; the clinical intensity of fellowship training has not been conducive to adequate development of physician scientists in this specialty. Public recognition of the clinical value of intensivists has increased clinical demand, and this reduces the available time for trained intensivists to devote to research. As a result, careful research of the pathophysiology and treatment of critical illness, with emphasis on long-term outcome, has been very limited. Special needs children represent a large fraction of children requiring critical care, and survival of critically ill children with residual disability or chronic disease has become more common. To meet these problems, the National Institute of Child Health and Human Development (NICHD) has established the Pediatric Critical Care Scientist Development Program (PCCSDP), administered by the University of Utah School of Medicine. The Program Director is J. Michael Dean, MD, MBA, Professor and Vice Chairman of the Department of Pediatrics. The program will select the most outstanding junior faculty candidates for sustained training as PCCSDP Scholars in excellent research settings throughout.
the United States. These NIH funded research settings may be clinical or basic science, and may be in any field relevant to pediatric critical care. Translational research, moving clinical problems into the laboratory and incorporating scientific findings into bedside care, requires a physician scientist who maintains a sound research career, in addition to providing clinical care. The goal of the PCCSDP is to increase the number of highly trained, successfully funded and sustainable pediatric critical care physician scientists, who will do translational research to enhance the scientific understanding, clinical management and rehabilitation of critical illness in children, leading to better long term outcome.

B. Program Plan and Organization

The Pediatric Critical Care Scientist Development Program (PCCSDP) is a national training program, administered at the University of Utah School of Medicine by the Program Director, Dr. Dean. The National Advisory Committee is composed of outstanding scientists and leaders in pediatric critical care, provides oversight for the program, selects applicants for funding as PCCSDP Scholars, and provides mentorship for PCCSDP Scholars. Potential applicants may identify outstanding mentors from their own institutions, or from the roster of mentors that will be maintained by the PCCSDP. The training program requires institutional commitment to the Scholar, and provides an annual PCCSDP retreat to facilitate interaction with the National Advisory Committee members, and site monitoring by the Program Director to assure quality of the training environment for each Scholar.

The committee membership has been selected from established leaders in pediatrics and pediatric critical care and consists of the following individuals:

- Jeffrey Blumer, PhD, MD
- Jeffrey Fineman, MD
- Thomas Green, MD
- Margaret K. Hostetter, MD
- Patrick Kochanek, MD
- George Lister, MD
- M. Michele Mariscalco, MD
- Daniel Notterman, MD

In addition to these named committee members, the National Advisory Committee has liaison representatives from the Pediatric Section of the Society of Critical Care Medicine (Stephanie Storgion, MD), and the Section on Critical Care in the American Academy of Pediatrics (Jeffrey Burns, MD). The Program Director chairs the National Advisory Committee meetings, except for Scholar selection (discussed below). These 11 persons (eight named above, two societal liaisons, and Program Director) will be voting members. NICHD is represented by Carol Nicholson, MD, an ex-officio, non-voting representative who attends and participates on the National Advisory Committee.

**Jeffrey L. Blumer**

Dr. Blumer is Professor of Pediatrics and Pharmacology at Case Western Reserve University, and has a distinguished research career in pharmacology and pediatric critical care. Dr. Blumer brings experience with pediatric critical care clinical drug trials, as the Center for Drug Research at Rainbow Babies and Children’s Hospital, partly supported by an NIH PPRU grant, is the largest pediatric critical trials program in the country. Dr. Blumer has trained numerous critical care scientists over the past two decades.

**Jeffrey Fineman**

Dr Fineman is Professor of Pediatric Critical Care Medicine at the University of California, San Francisco, and Associate Investigator in the Cardiovascular Research Institute (CVRI). Dr Fineman has a distinguished career in pediatric critical care (practicing pediatric cardiac intensive care), basic science research, and training physician scientists. He has longstanding NIH funding. His experience at the CVRI, a premiere training center for physician scientists, will be of great value to the PCCSDP.

**Tom Green**

Dr. Green is Professor and Chairman of the Department of Pediatrics at Northwestern University Medical School, and has a distinguished career in pediatric pulmonary medicine and critical care. Dr. Green has an outstanding research career and is well published. His experience and understanding of the required interdisciplinary approach to accomplish critical care research will be important to the PCCSDP.

**Margaret Hostetter**

Dr. Hostetter is Professor and Chairman of the Department of Pediatrics at Yale University School of Medicine, and has a distinguished research career. She has been the Program Director for the Pediatric Scientist Development Program (PSDP) coordinated by the Association of Medical School Pediatric Department Chairs (AMSPD), which is a unique program providing fellowship support for research career development in any pediatric field. The PSDP also has an established track record, and Dr. Hostetter has excellent knowledge of proven successful strategies that assure development of physician scientists.

**Patrick Kochanek**

Dr. Kochanek is Professor of Critical Care Medicine at the University of Pittsburgh and is the Director of the Safar Center for Resuscitation Research. He also serves on the Advisory Board for the National Center for Medical Rehabilitation Research (NCMRR) at NICHD. He directs a T32 program “Training in pediatric neurointensive care and resuscitation research”, and has a long, distinguished record of research in mechanisms of brain injury. His research experience and administrative experience with the T32 program will be of great value to the Program Director and the National Advisory Committee.

**George Lister**

Dr. Lister is Professor and Chairman of the Department of Pediatrics at the University of Texas, Southwestern Medical School, and has a distinguished career in pediatric critical care and basic science research. He has been the editor for the Subboard of Critical Care Subboard of the American Board of Pediatrics since it was established. He has maintained a T32 program “Development of cardiovascular and pulmonary function” that is currently in its 26th year of funding. Dr. Lister has published, over 100 papers, including manuscripts concerning the development of academic pediatricians and research scientists. His clinical, teaching, and research experience will be of tremendous value to the Program Director, the National Advisory Committee, and PCCSDP Scholars.
Michelle Mariscalco
Dr. Mariscalco is Assistant Professor of Pediatrics at Baylor College of Medicine. She has been the director of the Clinical Leukocyte Function Laboratory since 1988 and director of the critical care fellowship program since 1989. She directs a T32 program “The critically ill developing host: from pathogenesis to outcomes”, and her experience with training pediatric critical care fellows via this mechanism will be very valuable to the PCCSDP.

Daniel Notterman
Dr. Notterman is University Professor of Pediatrics, Molecular Genetics, Microbiology and Immunology and Chairman of the Department of Pediatrics at UMDNJ-Robert Wood Johnson Medical School. Dr. Notterman directed Pediatric Critical Care Medicine at Cornell University Medical College until 1994, when he took leave to pursue a mid-career training program in molecular biology at Princeton University. He remained at Princeton to conduct research and maintained clinical skills by attending in the PICU at Robert Wood Johnson Medical School, where he was appointed Chairman in 2002. Dr. Notterman is a recognized leader in pediatric critical care, and his career change into a laboratory setting provides a valuable perspective to the PCCSDP Program Director and National Advisory Committee.

Select Applicants for Funding as PCCSDP Scholars

The National Advisory Committee will normally be chaired by the Program Director, but for purposes of selection of PCCSDP Scholars, the Committee will elect an ad-hoc chairman. The Program Director and the NICHD representative will outline and reiterate important aspects about the program and the peer review process. The Program Director will report the total number of application inquiries, and will describe any applications that have been excluded from consideration by the National Advisory Committee (e.g. applications from ineligible candidates, incomplete applications). The conflict of interest policy used by NIH Study Sections will be explained and used in the review process for PCCSDP, and signed conflict of interest forms will be obtained from all participants in the peer review process. The peer review process will be carried out under the direction of the ad-hoc chairman. The Program Director and NICHD representa-

Provide External Mentorship for PCCSDP Scholars

The National Advisory Committee will provide external mentorship to PCCSDP Scholars. Obviously, each Scholar will be provided mentorship at their training institution, especially from the research mentor with whom they pursue their scientific training. The PCCSDP will provide external “suprainsitutional” mentorship by enabling the Scholar to interact closely with the National Advisory Committee members, by assigning two Committee members to specifically act as personal contacts for the Scholar throughout the year, by having Committee members discuss academic development with each Scholar at the annual PCCSDP retreat (and more frequently via their personal contacts), and by providing site visits from the PCCSDP to the training institution (either by the Program Director or a designated member of the National Advisory Committee). The two assigned Committee members and Program Director will act as a personal advisory committee for the Scholar. These three individuals will provide an annual assessment to the Scholar and the mentor. In addition, Scholars will be expected to seek extramural funding between 15 and 18 months into training, and Committee members will provide an external peer review to these proposals as they are prepared for submission to funding agencies.

The Committee will also provide mentorship during the application process. In initial years, applicants will be invited to attend the annual PCCSDP retreat, where they will be interviewed by members of the Committee, and will participate in the scientific portion of the meeting. This will enable contact with Committee members, even for applicants who are not funded as Scholars, providing added richness to the value of applying to this program. All applicants will be expected to discuss their career development with Committee members, and even unsuccessful applicants will derive constructive feedback and benefit from this process.

PCCSSD Mentors

The PCCSDP is a national program open to outstanding applicants and mentors from throughout the United States. In a traditional K12 or T32 program geographically located at a single institution, the mentors are preselected by the Program Director, and trainees are recruited to that institution to be mentored by these specific scientists. This program is fundamentally different because PCCSDP Scholars will train in laboratories that are geographically dispersed in different institutions. The National Advisory Committee will evaluate the quality of the mentor for each specific Scholar during the peer review process.

While applicants may identify a mentor at the institution where they complete fellowship training, the NIH encourages consideration of training at a different institution. In “Special Requirements,
Section E. PCCSD Candidates”, the RFA reads “Although remaining at the institution of their fellowship is a possibility for trainees under this award, academic diversity through research training and clinical practice at a different institution should be strongly encouraged.” The PCCSDP will maintain a national roster of mentors, rather than an institutional roster, and the Program Director will assist applicants in contacting mentors. Applicants will be encouraged to discuss opportunities with the Program Director, and will be directed to contact potential mentors prior to developing their application for an award. This mentor roster is used to assist the Program Director and is in no way restrictive – applicants may identify outstanding mentors who are not on the PCCSDP roster.

The PCCSDP will actively recruit skilled, outstanding mentors to be added to this roster, with evaluation and consideration by the National Advisory Committee. We strongly encourage applicants to explore opportunities that are outside their fellowship institutions to gain more diversity with respect to research and clinical aspects of critical care. We anticipate that in the first year, simply because of the time constraints of developing applications in time to start funding in January 2005, applicants are likely to identify mentors at their fellowship institution, or via contacts developed through their fellowship mentors. In later years of the PCCSDP, we expect that applicants will increasingly select mentors who are not at their fellowship institution, as there will be more time for the applicant to establish contact and consider training with potential mentors from the PCCSDP roster.

The criteria for selection of mentors are 1) a record of outstanding scientific accomplishment; 2) a strong record of extramural funding, preferably from NIH; 3) scientific expertise and interests related to pediatric critical care; and 4) demonstrated excellence in mentoring trainees. These criteria are used when adding mentors to the PCCSDP roster, and are applied during peer review of PCCSDP applications. During review of applications, the selection committee will examine the record of the mentor’s previous trainees, especially subsequent academic positions, publications and grant awards. PCCSDP Scholars will provide an annual evaluation of their mentor to the Program Director and National Advisory Committee members.

C. Details of Training Program

The PCCSDP is a national program, and training is distributed among different institutions throughout the United States, with the intention of funding the very best young faculty to train in the most outstanding laboratory settings. The goal of the PCCSDP is to increase the number of highly trained, successfully funded and sustainable pediatric critical care physician scientists, who will do translational research to enhance the scientific understanding, clinical management and rehabilitation of critical illness in children, leading to better long term outcome. The training program consists of local training and mentorship that will occur at the institution at which the training is located. In addition, the PCCSDP itself will provide a “suprainstitutional” level of mentorship for the Scholars and mentors in this program.

Description of Program Support

The PCCSDP requires five years of commitment and participation from PCCSDP Scholars and their institutions. During Phase I, the PCCSDP will provide significant funding (see below) for the individual as he or she pursues intense research training. During Phase II, as the Scholar transitions to an independent investigator, the PCCSDP will provide limited support in the form of travel to the annual PCCSDP retreat.

Phase I will last two to three years. During this period, the Scholar will pursue intense training in a mentored laboratory or clinical research setting. The Scholar will develop a short and long-term career development plan, including plan for future research activities. This development plan must be outlined in the application for funding, refined upon entry into the program, and evaluated on at least an annual basis. The Scholar must be protected from clinical and administrative responsibilities so that a minimum of 75% time is protected for research training. The Scholar will meet with the National Advisory Committee at the annual PCCSDP retreat, and protection from clinical and administrative responsibilities will be discussed and evaluated. During Phase I, the Program Director (or a designee from the National Advisory Committee) will visit each training institution and will verify that the Scholar is being provided with the institutional commitment described in the Scholar’s application and the department chair’s endorsement letter Renewal for two years, and in exceptional circumstances, three years, will be dependent on satisfactory progress of the Scholar, as judged by the National Advisory Committee and the Program Director.

During Phase I, Scholars may receive up to $75,000, benefits, limited laboratory support, travel to the annual PCCSDP retreat and to appropriate scientific meetings, and limited tuition support for specific training opportunities. Indirect expenses will be provided to training institutions at 8% of all outlined costs except tuition, which is not eligible for indirect expense reimbursement.

During Phase II, Scholars must be supported by their institution, preferably with extramural funding such as K08 or K23 NIH awards. Scholars in Phase II must be protected from clinical and administrative responsibilities at least 50% of their time, according to the RFA for this program. Institutions are strongly encouraged to protect Phase II Scholars for 75% of their time, reflecting our goal that these Scholars will be supported by K awards. Phase II Scholars will attend the annual PCCSDP retreat, and discuss their long-term career development with the National Advisory Committee at these annual retreats. During Phase II, the Program Director will not site visit the training institution. The PCCSDP will provide up to $1,500 for travel to the annual meeting for Phase II Scholars.

PCCSDP Training Activities

The PCCSDP provides “value added” to the training of pediatric critical care scientists by acting in a complementary manner to the local institution. Activities of value to the PCCSDP Scholar include the following:

- Assistance with original application, by the Program Director
- Interviews and interactions with National Advisory Committee members
- Assignment of personal advisory committee for each Scholar
- Assistance with preparation of extramural grant proposals
• Site visits of Phase I Scholar training institutions to verify training environment
• Participation at the annual PCCSDP retreat

Applicants may contact the Program Director, who can provide assistance in contacting potential mentors, and provide helpful input into career development ideas and research proposals. The Program Director will not assist with writing applications, but can provide helpful advice to applicants because he does not play a role in selection of PCCDSP Scholars. Selection of Scholars is the responsibility of the National Advisory Committee, as previously described.

Interaction with the leaders and outstanding scientists who comprise the National Advisory Committee is a major benefit to participants in the PCCSDP. These interactions will include interviews for applicants during the selection process, scientific interaction at the annual retreat, discussion of the applicants’ and Scholars’ academic and research development plans, and presentation of selected faculty development topics by Committee faculty and guest speakers. In addition, the Committee will convey expectations to each applicant and Scholar, particularly with respect to the timeline for seeking the next level of research funding.

Each Scholar will have two individuals on the National Advisory Committee specifically assigned to monitor their progress and act, with the Program Director, as their personal advisory committee. The Scholar will maintain contact with these advocate Committee members throughout the year, may seek advice from these individuals, and will obtain input into the refinement of their faculty development plan as the program proceeds. This is an important benefit for Scholars, particularly when they question the advice of their local mentor. The Scholar’s personal advisory committee, acting as the Scholar’s advocate, can provide a “reality check” for the Scholars and their mentors throughout the program.

Phase I Scholars will begin early preparation of K08 or K23 proposals for submission to the NIH. The PCCSDP will help provide structure to this timeline by interactions between the National Advisory Committee and the Scholar, both at the annual retreat and throughout the year. Phase I Scholars will write a two to three page draft outline of a K08 or K23 proposal or, in rare instances, an R01 proposal, by the end of the first 12 to 15 months in the program. This draft will be submitted to the PCCSDP and will be disseminated via eRoom™ to National Advisory Committee members for constructive feedback. The personal advisory committee assigned to each Scholar will provide a written critique of the proposal concept, though any Committee member may provide input to the Scholar. The Scholar will develop the application for submission to the NIH by 18 months into the PCCSDP, with the goal of obtaining funding by the end of Phase I. At least six weeks prior to the NIH submission deadline, the Scholar will send a nearly complete draft and the PCCSDP will do a “mock review”, providing “pink sheets” back to the Scholar and mentor in ample time for the Scholar to improve the proposal based on those comments. If the National Advisory Committee does not have appropriate expertise to provide this review, the Program Director will identify ad hoc reviewers to supplement the review. In this manner, the Scholar will have an opportunity to obtain an initial, external, rigorous scientific evaluation for their proposal in time to not “waste a cycle” in the NIH peer review process. If a Scholar achieves K award funding on the first cycle (without a resubmission), then the Scholar will automatically transfer into Phase II, and the PCCSDP may be able to fund an additional Phase I Scholar.

The Program Director or a designee from the National Advisory Committee will site visit each training institution on an annual basis during Phase I training. During these site visits, the Program Director will meet with the Scholar, the training mentor, the critical care Division Chief, and the pediatric Department Chairman. The Program Director will verify that the institution is meeting its obligations to the Scholar as outlined in the original application submitted by the Scholar. The Program Director will solicit critical feedback from these individuals about the PCCSDP (and how it might be enhanced in the future).

#### Annual PCCSDP Retreat

The PCCSDP will have an annual scientific retreat in October or November of each year, lasting 2 1/2 to 3 days. In the first two years, this retreat will be at The Lodges in Deer Valley. The setting is convenient to the Salt Lake International Airport, but is in a relatively secluded location, facilitating interaction among meeting participants in a beautiful environment. The location of future PCCSDP retreats will be determined in discussions with the National Advisory Committee and the NICHD.

At the time of the first annual retreat (November 2004), there will be no Scholars in the program, since awards are anticipated to begin January 2005. For this retreat, the program has limited financial support for applicant travel. Mentors of these applicants are also invited to attend the retreat, at their own institutional expense. The National Advisory Committee will interview the applicants, and will then review and prioritize the applications. During this closed-session peer review meeting, the applicant and mentor participants will be free to visit Park City or explore the mountains. The selection decision will not be discussed or announced at the retreat, and the Program Director will send out notification letters after the retreat.

During this first PCCSDP retreat, the invited applicants and their mentors will be treated as if the applicants were Phase I Scholars. Each applicant will spend time with Committee members to discuss their academic and research development plans, research ideas, and faculty development questions. Each mentor will have an opportunity to present a talk concerning their laboratory research, facilitating interaction among the applicants from different institutions. In addition, successful scientists will attend the retreat and provide 45 to 60 minute presentations to the retreat participants. The goal is to make this initial retreat a valuable scientific experience for the applicants and their mentors, to allow the Program Director and National Advisory Committee to conduct the peer review process, and to enable better planning for subsequent retreats.

In November 2005, applicants, Phase I Scholars (from the first year), their mentors, and up to three guest speakers will be invited to attend. Applicants will be interviewed and the selection process will proceed as described for the first retreat. The Committee will meet with each Scholar to evaluate progress during the year. Scholars will present their research findings, in 20 to 30 minute talks, to their colleagues, applicants, mentors, and Committee members. This will be an
Local Institutional Training Activities

PCCSDP Scholars will be able to carry out the activities described in their training proposals if the local institution provides the resources and academic protection necessary to achieve the training goals. The peer review selection process is designed to assure that each trainee will be placed in an outstanding research setting with an experienced mentor, and the annual site visit by the PCCSDP Program Director will help guarantee that the Scholar receives suitable protection and resources from the training institution.

Local training responsibilities include ongoing refinement of the Scholar’s long term development plans, assistance with preparing grant applications so that the Scholar can phase into independent investigator status, opportunities to present research in laboratory research meetings, Departmental conferences, and so forth. Journal clubs, didactic training such as might occur in a K30 program, and other educational activities are a local institutional responsibility. These activities will have been described in the Scholar’s original application, and the quality of these activities is one of the criteria for selecting an individual for funding.

Local institutional training is required for Scholars in the responsible conduct of research. Scholars should actively participate in the process of obtaining approval from applicable committees, such as the Institutional Review Board (IRB) or institutional animal use committee. For Scholars involved in clinical research, the institution should also provide training in Good Clinical Practice (GCP), regulations of the Food and Drug Administration (FDA), and international harmonization efforts.

D. Selection of PCCSDP Scholars - Criteria for Review

The Committee will evaluate the candidate, the mentor, the institutional environment, and the research plan. The candidate must have demonstrable potential to be an excellent physician scientist, whose research interests are likely to improve long-term outcomes and quality of life for children who sustain critical illness or injury. The candidate must make a five-year commitment to the training plan. The training plan proposed by the candidate must include appropriate didactic material, training in the responsible conduct of research, and should take advantage of existing programs such as K30 training programs. Letters of recommendation must support the exceptional caliber of the candidate. The mentor, even if already included on the PCCSDP roster, must describe the mentoring plan in detail. This includes the mentor’s time commitment, and the relationship of the mentor’s plan with the academic goals of the trainee. The mentor statement should also describe the laboratory facilities, and provide evidence of expertise in training junior faculty in the research setting. This evidence should include a tabular presentation of previous trainees (date of training, current academic position, grants awarded, publications). Such tables will be excluded from the page limitation on this section of the application. The institutional environment must be suitable for a PCCSDP Scholar. Most importantly, there must be institutional commitment to the Scholar, particularly with respect to protection of the Scholar from non-training responsibilities such as teaching, administration, and clinical care. Provision of 75% protection throughout the five years of training is highly encouraged. Opportunity for faculty employment and academic advancement within the institution must be demonstrated. Finally, the research plan should demonstrate the ability of the candidate to consider a scientific problem, develop a hypothesis-driven proposal, outline a research design, and describe the implementation. The research plan must address human subjects or vertebrate animal issues, as applicable. The applicant is expected to write the research plan, but should have discussed the research idea with the mentor proposed in the application. The research plan will form the major agenda for discussion when the National Advisory Committee interviews the applicant at the annual retreat. The applicant should demonstrate a good understanding of the research problem and be prepared to discuss the ideas informally with the Committee during the interview.

E. Program Evaluation

The major criteria for success of the PCCSDP include the retention of PCCSDP Scholars in academic positions, outstanding scientific productivity of these new scientists over subsequent years, and the ability of the Scholars to obtain and sustain extramural grant support of their research. These are relatively long-term measurements of performance. Short-term measures of success of the PCCSDP will include presentations at scientific meetings and peer reviewed publications by PCCSDP Scholars during their training, completion of didactic courses delineated in Scholar training plans, documentation of required training in human subjects protection and research ethics, documentation of academic protection of the Scholars during Phases I and II, and most importantly, submission and funding of K-level or R-level NIH grants. In addition, annual progress reports will be obtained from each Scholar and each mentor. The PCCSDP will obtain follow up information from all Scholars for at least five years after graduation from the program. Scholars must agree prospectively to provide this information to assist with program evaluation.

Application Procedure

Instructions for applicants are provided in a separate document Instructions for Applicants on the next two pages.

Contact Information:

For inquiries from applicants, potential mentors, or academic advisors of young faculty, please contact the program director Dr Mike Dean at mike.dean@hsc.utah.edu and indicate “K12 Grant Inquiry” as the subject of the email.
Eligibility

PCCSDP Scholars should normally be within five years of completion of fellowship training in pediatric critical care. Interested applicants who completed fellowship training more than five years prior to entering the PCCSDP should contact the Program Director (J. Michael Dean, M.D., M.B.A.) to discuss eligibility before submitting an application.

Individuals who have previously received an NIH K08, K23, or R-type award are not eligible for support under this program. If you have any question about eligibility, please contact the Program Director before submitting an application (or giving up!)

Structure of the Application

The application to become a PCCSDP Scholar is similar in organization to training award applications such as NIH K08 or K23 applications. Please follow the organization and page limitations as shown below:

I. Section I. Basic Administrative Data
   a. Face page (NIH Form Page 1)
   b. Budget pages (use NIH Forms)
   c. Biographical sketches (candidate and mentor, NIH format up to four pages each)
   d. Other support information for the mentor
   e. Resources (PHS 398 Resources Format page)

II. Section II. Training Application
   a. Description of the candidate (limited to five pages)
      1. Candidate Background and education
      2. Career goals and objectives
      3. Planned training activities during the award period
   b. Statement by the mentor, including description of past trainees (trainee information may be provided in tabular form; non-tabular information is limited to two pages)
   c. Environment and Institutional Commitment to Candidate (limited to two pages)
      1. Description of the institutional commitment
      2. Commitment to the candidate, including Phase II of PCCSDP
   d. Research Plan (parts 1 to 4 limited to ten pages)
      1. Statement of hypothesis and specific aims
      2. Background, significance and rationale
      3. Preliminary studies and any results
      4. Research design and methods
      5. Human subjects
      6. Vertebrate animals
      7. Literature cited

The application must include three letters of recommendation (submitted in sealed envelopes), including a letter of commitment by the candidate’s Department Chair. The Chair at the mentoring institution must guarantee 75% protection from clinical and administrative duties during Phase I. The Chair at the sponsoring institution must indicate a plan to employ the Scholar with at least 50% (preferably 75%) protection for continued career development during Phase II. In some instances, these institutions will be the same.

- Applicant is at institution A and will go to institution B for Phase I, with plan to return to institution A for Phase II; intention of faculty appointment and on-going protection from clinical and administrative duties by Chair A required. Endorsement by Chair B must include 75% protection, but does not need to express employment commitment beyond Phase I training period.
- Applicant is at institution A and will pursue Phase I and Phase II training at institution A; commitment for Phase I and Phase II by Chair A required.
- Applicant is at institution A and will go to institution B to pursue Phase I training and will remain at institution B for Phase II; commitment for Phase I and Phase II by Chair B required. Endorsement by Chair A optional.
Program Duration and Support

The PCCSDP requires a five-year commitment from the Scholar and the participating institutions. The Program consists of two phases. PCCSDP Scholars may receive salary support up to $75,000 per year during Phase I, as well as support for laboratory supplies, travel, and tuition. Indirect expenses are restricted to 8% of eligible costs. Phase I is normally two years, but in exceptional circumstances, third year awards may be available. During Phase II, individuals are expected to be supported by their institution, preferably with K08, K23, or other NIH grant support.

Application Deadline

The application deadline is October 18, 2004. Applicants should plan to attend a meeting in Deer Valley, Utah, November 11 – 14, 2004, as part of the application process. Partial travel support will be available from the PCCSDP for applicants.

Applications should be mailed to: J. Michele Dean, MD, MBA, c/o Paige Elkins (801/581-7373) 615 Arapeen Drive, Suite 202, Salt Lake City, Utah 84108-1284

Inquiries to Dr. Dean should be sent to mike.dean@hsc.utah.edu. The subject header of your email should be “PCCSDP Applicant” to avoid email filtering and facilitate prompt response to your inquiry.

Pediatric Critical Care Publications

AAP Grand Rounds, July 2003 (p8)
Informed consent for the critically ill
Heather T. Keenan, MD

AAP Grand Rounds, August 2003 (pp19-20)
Long-term care for ventilator-dependent children
Wan C. Tsai, MD

AAP Grand Rounds, October 2003 (pp 49)
Neurodevelopmental outcome after cardiac surgery using ECL
Susan L Bratton, MD

AAP Grand Rounds, November 2003 (pp 61-62)
Inflicted traumatic brain injury in young children
Kimberly D. Aiken, MD

AAP News, November 2003 (pp 234-235)
Guidelines address acute management of pediatric brain injury
James Fortenberry, MD

AAP Grand Rounds, January 2004 (pp 7-8)
Excess hospitalization costs attributable to medical injuries
Fiona H. Levy, MD

AAP Grand Rounds, January 2004 (p 9)
Catheter-related blood infections in the ICU
Susan L Bratton, MD

AAP Grand Rounds, May 2004 (pp 56-57)
The consensus conference on diabetic ketoacidosis
Susan L Bratton, MD

AAP Grand Rounds, May 2004 (pp 56-57)
Thrombolytic treatment of infectious endocarditis
Gail E. Wright, MD

AAP Grand Rounds, May 2004 (pp 50-51)
Varicella vaccine decreases hospitalization in varicella-related group A strep infections
Thomas V. Brogan, MD

AAP Grand Rounds, June 2004 (pp 66-67)
Genes and Meningococcal disease
Susan L. Bratton, MD

AAP Grand Rounds, June 2004 (pp 63-64)
Death, pulmonary hypertension, and sickle cell disease
Susan L Bratton, MD
The PedsCCM website (PedsCCM.org) will be 9 years young this November. Hopefully, the site has grown with our community and continues to provide a unique, integrated resource for communication and education for pediatric critical care practitioners. Google, the internet search engine that has become a verb in common parlance, seems to “think” so. Type in “pediatric critical care medicine” and the PedsCCM website comes up first on the hit list. (Google prioritizes results based upon links and traffic to a website.) In 2003, PedsCCM processed 2.42 million page requests and 98,133 downloads (a total of 95 gigabytes of data) in 936,017 visits by 288,426 unique visitors*. A graphic representation of the visits/year to PedsCCM over the past 6 years appears in the figure.

If there is information relevant to pediatric critical care on the web, there’s a link to it from PedsCCM. New clinical research articles in a variety of journals, clinical tools and calculators, lectures, conferences, NIH grants and announcements are all available. If you find appropriate resources out there that we have not linked to, please let us know.

We are particularly proud of the PedsCCM Evidence-based Journal Club, where over 200 critical appraisals of clinical trials in critical care medicine are available. There is a searchable database of these reviews, and even a version you can download into your Palm OS PDA. Each review, done by faculty and fellows from around the world, is edited by at least two of our dedicated editorial staff: Adrienne Randolph, Kathy Meert, Mona McPherson, Scot Bateman and Al Torres. With the exponential growth of clinical research recently, having easily accessible pre-appraised sources of evidence is an integral part of evidence-based practice today.

The site is supported graciously in part by the AAP SOCC, the Pediatric Section of the SCCM, and by the largely voluntary contributions of many institutions in return for listing job positions in our physician and nursing jobs databases.

Nine years is young for humans, old for dogs, and ancient in internet time. The aesthetics and functionality of the site, although hopefully still acceptable, have not been updated in several years. With the explosion of new internet technology, the editors have neither the time nor expertise today to fully overhaul the site. We are exploring various outsourcing options, and would very much welcome the input and help of anyone in the community with the time, ideas, energy, interest to help PedsCCM move forward into the 21st century. Thanks to everyone for your support as we leave our “childhood” years.

* As determined by their IP addresses; because of dynamic IP address assignment by dial-up Internet Service Providers, this is unlikely to represent this many different human beings!

Barry Markovitz, MD, MPH

Web Site Visits Per Year
# CALENDAR OF EVENTS


<table>
<thead>
<tr>
<th>Meeting Title</th>
<th>Meeting Dates</th>
<th>Location</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>15th Annual Critical Care Colloquium</td>
<td>9/30-10/2/04</td>
<td>New York, NY</td>
<td><a href="http://pedsccm.wustl.edu/organizations.html#pccc98">http://pedsccm.wustl.edu/organizations.html#pccc98</a></td>
</tr>
<tr>
<td>2004 Course on Neonatal and Pediatric Critical Care Transport Medicine</td>
<td>10/10 - 12/04</td>
<td>San Francisco, CA</td>
<td><a href="http://www.aap.org/sections/transmed/course.htm">http://www.aap.org/sections/transmed/course.htm</a></td>
</tr>
<tr>
<td>5th International Symposium on Pediatric Cardiac Intensive Care</td>
<td>12/1 - 04/04</td>
<td>Miami, FL</td>
<td><a href="http://www.pcicsymposium.org">http://www.pcicsymposium.org</a></td>
</tr>
<tr>
<td>7th European Postgraduate Course in Neonatal and Pediatric Intensive Care</td>
<td>3/10-12/05</td>
<td>Berne, Switzerland</td>
<td><a href="http://pedsccm.wustl.edu/org-meet/postgraduate_course.pdf">http://pedsccm.wustl.edu/org-meet/postgraduate_course.pdf</a></td>
</tr>
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**Benefits of Being a Section on Critical Care (SOCC) member!**

- **Section on Critical Care Web site**
  Visit [http://www.aap.org/sections/criticare](http://www.aap.org/sections/criticare) for important information about upcoming events and Section related activities.

- **Section on Critical Care E-mail List**
  The E-mail list allows the AAP Staff and SOCC Executive Committee to communicate with members through periodic e-mail messages.

   If you would like to join the E-mail list, simply: e-mail Sue Tellez at [stellez@aap.org](mailto:stellez@aap.org) with “SOCC LISTSERV” in the subject line.

   **Be sure to include your name and contact information.**
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MEMBERSHIP DIRECTORY ON-LINE!

The AAP has added a link to the section membership roster on the Section’s home page on the Members Only Channel. The roster will first appear as an alphabetical listing, and each member’s name links to more detailed information about that person. Be sure to contact the Membership Department at membership@aap.org should any of your information change, such as name, address, phone, fax or e-mail address.

You may also make the changes on-line on the Members Only Channel. Just follow the link on the Section’s home page!