Much has changed since the first Med-Peds residency was started in 1967. NMPRA was founded and incorporated as a non-profit organization by Jeff Bates in 1999. ACGME has recognized Med-Peds residencies with their own separate accreditation since 2006. Med-Peds has been meeting nationally in conjunction with the AAP since 1996, making this year’s Boston conference the 12th annual meeting. We’ve come a long way!

This year’s national meeting in Boston brought together members from all over the country. This year’s case competition was fierce, and the award recipients’ presentations were fantastic.

In celebration of the 10th anniversary of the founding of NMPRA and of 40 years of Med-Peds Residencies, the 13th annual National Conference will be in Washington, DC in 2009. Mark your calendars and plan to join us; it promises to be a year to remember.

Check out our website at [www.medpeds.org](http://www.medpeds.org) for more information about the national conference, how to join or get more involved in Med-Peds, and much more!

Janelle Clauser, Editor of the Perspective and your NMPRA secretary
Dr Ann Kao
Massachusetts General Hospital
Cambodian Health Committee

Dr. Kao's keen interest in international medicine has inspired her to divide her time. She works as both a Pediatric Clinician-Educator at Massachusetts General Hospital (MGH) and as a Pediatric Coordinator with the Cambodian Health Committee. Previously, Dr. Kao was a Durant Fellow in Refugee Medicine and Clinical and Research Fellow at MGH. She was trained in both internal medicine and pediatrics. In 2005, she worked on behalf of the tsunami relief effort as part of “Project HOPE,” and as a result co-authored an article for the New England Journal of Medicine.

She has also traveled to Rwanda, where she started a health center and hospital in a refugee camp, as well as to Romania and Vietnam. Domestically, she has worked at a Navajo reservation in Chinle, Arizona, and at an urgent-care clinic in Chelsea, Massachusetts, serving a population largely consisting of immigrants from Latin America.

Dr. Kao received her medical degree from the University of Washington, Seattle in 2000, and completed her combined residency in Internal Medicine and Pediatrics at Massachusetts General Hospital, Massachusetts General Hospital for Children, and Children's Hospital Boston in 2004. She received an M.P.H. from the Harvard School of Public Heath in 2007 as a CFHU Fellow.

Currently she is co-director of the Pediatric Hospitalist Program at Massachusetts General Hospital for Children, Attending in Internal Medicine and Pediatrics at MGH, and Clinical Advisor to the Cambodian Health Committee.
OTC: Not Just Over-the-Counter Supplements

Joel McLarry MD, University of Alabama at Birmingham, Med-Peds Resident
John Jennings, MD, University of Alabama at Birmingham, Resident
Jason Hartig MD, University of Alabama at Birmingham, Assistant Professor

Case:
41 year old Hispanic male presented with altered mental status after four days of gastro-enteritis that began when visiting New Orleans. He was noted to have tachycardia and a blood pressure of 220/118 and was diagnosed with hypertensive emergency. After admission to the hospital, the patient's mental status fluctuated between somnolent and combative, leading to intubation for airway protection and transfer to the MICU.

Past Medical History:
In 2003, the patient, previously thought to be healthy, was admitted to an outside hospital and diagnosed with metabolic encephalopathy attributed to B12 toxicity from numerous body building dietary supplements.

Clinical course:
After admission to the MICU, patient became comatose and was noted to have hyper-ammonemia, which continued to rise to 753 without any change in AST/ALT. MRI showed diffuse cerebral edema that spared the occipital lobes and posterior fossa. At that time, the patient was placed on continuous venovenous hemodialysis to remove ammonia, however, despite CVVHD, the ammonia level remained elevated greater than 400.

The following day the patient was placed on nitrogen scavengers, sodium benzoate and sodium phenylbutyrate, precipitously dropping the ammonia level to 50, however, the patient remained comatose. Repeat MRI brain showed impending uncal herniation secondary to progressive cerebral edema from prolonged hyperammonemia. Concurrently, the patient developed hypotension and, despite aggressive management, the patient became pulseless with fixed, dilated pupils and was pronounced dead.

Plasma amino acid profile showed elevated glutamine but normal citrulline concentrations, which was non-diagnostic for ornithine transcarbamylase deficiency secondary to citrulline supplementation from dietary supplements. Post-mortem liver biopsy was performed and enzyme assay demonstrated a partial OTC deficiency, a urea cycle defect; confirming that the dietary supplements were not the cause of the patient’s illness.

Discussion:
Liver disease is the most common etiology of hyperammonemia, however, as evidenced by this case, it is only one of the many etiologies, including urea cycle defects, organic acidemias and lipid oxidation defects. Each of these etiologies require prompt recognition and treatment to affect outcomes, and, specifically in this case, diagnosing his urea cycle defect (UCD) at initial presentation in 2003 could have prevented death. In UCDs, age at initial presentation can be variable secondary to partial enzyme deficiencies, and dietary supplements can confound the diagnosis, such as when amino acids are replenished distal to the enzyme defect. Therefore, an ammonia level should be part of any altered mental status work-up, and UCDs should be suspected in any setting of hyperammonemia, especially when the degree of illness does not corroborate the apparent clinical causes.
A case for transitional care: management of an adult survivor of congenital heart disease

Soumya Lakshmi Pandalai, MD, Banner Good Samaritan/Phoenix Children’s Hospital Medical Center, Med-Peds Resident

Case: A 29-year old female was admitted to the general surgery service for treatment of acute cholecystitis. Past medical history was positive for Tetralogy of Fallot with pulmonary atresia that had been treated with a Blalock-Taussig procedure in infancy followed by attempted repairs of a residual ventricular septal defect at 9, 12, and 21 years of age. The patient had also undergone pulmonary valve replacement and pacemaker implantation. Her medical care for these procedures occurred at a different referral center, but her follow-up and primary care had progressively become more intermittent over the past 5 years.

Upon admission, parenteral antibiotics, pain medications, and intravenous hydration were started, and adult cardiology was consulted. On hospital day 4 the patient was found somnolent and edematous, and arterial blood gas sampling revealed hypercapnea and marked hypoxia. Diuretics and fluid restriction were attempted with no improvement in symptoms. Due to worsening respiratory distress and edema the patient was transferred to the adult medical service on hospital day 6 and to the intensive care unit a day later. The patient was intubated and started on multiple vasopressor agents with alternating fluid boluses and diuretics given for treatment of congestive heart failure. On hospital day 16 pediatric cardiology was consulted who found the patient to be preload dependent due to the nature of her previous surgeries and findings on echocardiogram and recommended cardiac transplant. The patient was transferred to a transplant center for further management.

Discussion: This case highlights the challenge adult-trained physicians encounter in treating survivors of congenital heart disease. Many patients with congenital heart disease are living into their third and fourth decades of life, developing medical needs that are not encompassed in standard pediatric or adult medicine training. Additionally these survivors require longitudinal follow-up and management of complications that arise from their childhood illnesses. Internal Medicine-Pediatrics physicians are uniquely positioned to assist in the long-term care of patients that require attention to both these vital areas of care. In this case, transitional primary and secondary care may have assisted in earlier appropriate diagnosis and management of the patient’s condition so that she may not have had to be emergently transported to a cardiac transplant center.

“Many patients with congenital heart disease are... developing medical needs that are not encompassed in standard pediatric or adult medicine training.”
Aortic Dissection: An interesting cause of Aortic regurgitation

Russell James McCulloh, MD  PGY-4, University of Missouri, Med-Peds Resident

Case: A 13 year old female presents with acute onset chest pain and headache that awakens her at night. She describes the pain as radiating to her back and worse with inspiration. She reported tactile fever over the last 2 weeks.

On social history, she had not been seen by a physician in many years. Her mother reported her immunizations were up to date. She had not begun menses. She denied any tobacco, alcohol, drug, or excessive caffeine use. Her family history was reportedly negative.

Her physical exam displayed a scared child in no acute distress. Her BP was 135/75 HR 120 and RR 20. She was alert and oriented. She had wide spaced eyes, oral pharynx showed poor dentition with crowded teeth, a bifid uvula and arched palate. Her heart revealed a 2/6 diastolic murmur radiating to the left axilla with no elevation in JVP. Her lungs were clear to auscultation. Her extremities were asymmetric with long thin fingers and legs. The remainder of her physical exam was normal.

The patient had a CXR which was normal, and EKG which revealed T wave inversions in leads V1-V6. ESR was 30, CRP <1.0 and CBC w/differential within normal limits.

An echocardiogram was performed which revealed a large aortic dissection at the level of the thoracic aorta 5.5 cm in diameter and extending 4.2 cm in length. A CT surgeon was emergently called and asked to evaluate the patient. A CT Scan of the thorax was performed to further delineate the extension of the aneurysm, but the patient suffered an acute episode of syncope with pulselessness while being moved from the scanner. A cardiac rhythm showed PEA and the patient was aggressively resuscitated by ACLS protocol. The patient continued to be asystolic upon arrival to the operating room but immediately underwent sternotomy to control the likely ruptured aneurysm. Per report, the patient had a rock-hard left ventricle with uncontrollable massive bleeding with a ruptured aortic aneurysm. The patient was pronounced dead and further pathology of the aorta revealed fibroblasts in the connective tissue layers with large amounts of collagen deposition.

Discussion: Dissecting aortic aneurysms occur mainly in adults with uncontrolled hypertension. The Loeys-Dietz syndrome is an autosomal dominant syndrome similar to Marfan’s in clinical presentation that is characterized by a triad of arterial aneurysms and tortuosity, hypertelorism, and bifid uvula or cleft palate. It is caused by a heterozygous mutation in the genes encoding transforming growth factor receptors 1 and 2.

Unfortunately, our patient’s family was lost to follow up and the family was not able to consent for an autopsy or further genetic analysis. An understanding of this patient’s genetic condition prior to her presentation would likely have resulted in early detection of aortic aneurysms, medical and surgical treatment and further testing and prevention in affected family members.
Expanding Home Visitation and Community Sensitizations for Refugees in Waterbury, CT

Jeremy Schwartz, MD, Yale University, Med-Peds Resident
Tracy Rabin, MD, Yale University, Med-Peds Resident

Description: In 2007, sixty-six Burmese refugees (predominantly members of the Karen ethnic group) were resettled from camps on the Thai-Burma border to Waterbury, CT, and the Yale Med-Peds clinic became their medical home. Although we faced a number of challenges in integrating them into our practice, the major hurdle was sporadic attendance at clinic appointments. To deal with this issue, we initiated two home visits and community sensitizations. During these outings, a group of residents, an attending, and a nurse met with a large proportion of the community in an apartment in the building where most of the refugees live. Three residents held an adult and pediatric urgent care clinic in one bedroom while, in the main room, other residents provided education to the adults regarding treatment of fever and respiratory illnesses, instructions on collecting stool samples for ova and parasite kits, and answers to health-related questions. In addition to dispensing Children’s Tylenol (with dosing instructions) and thermometers, the nurse and two of the residents held a vaccination clinic for both adults and children. Importantly, these visits were also used to track down patients who required follow-up care but who had not showed up to clinic for visits.

Project Objectives and Goals

1. To improve the care we provide to our population of Burmese refugees by engaging them and caring for them in a community care model in a non-intimidating environment.

2. To help our patients gain an understanding for the Western model of illness and treatment while improving our own understanding of theirs.

3. To ensure that all members of this community receive comprehensive refugee-specific care. This includes completion of catch-up immunizations; PPD placement, reading, and appropriate follow-up; screening for intestinal parasites; screening for infectious diseases for which they are at high risk.

How do you plan to overcome potential barriers in your community?

We have already faced a number of barriers in caring for this community, and the goal of this project is to deal with the most fundamental issue: enhancing the relationship between care providers and the community such that patients are able to receive the health care that they need. Our ultimate goal is to involve community leaders who are learning English in ESL courses in assisting with translation during our visits, and in continuing to educate the providers about the Karen/Burmese model of illness.

How do you plan to assess the progress and achievement of your project?

We already have regular reviews with the International Institute of Connecticut as well as frequent communication with the Department of Public Health and St. Mary’s Hospital (with which our clinic is affiliated), to optimize access to high quality and culturally appropriate health care for these patients. We will also conduct quarterly reviews of the medical charts of our refugee patients to assess follow-up care, both refugee-specific care and general medical care.
The 2nd annual Midwest Region NMPRA Conference was held at The University of Chicago on October 6. The University of Chicago Internal Medicine, Pediatric, and Med-Peds Residency Programs, as well the American Medical Association all supported this full day conference. Over 60 medical students, residents and faculty from Ohio, Indiana, Illinois, and as far as New York attended. The conference featured several keynote speakers; three of the four were Med-Peds trained physicians, who focused on a wide-range of topics of interest to Med-Peds practitioners and researchers. Dr. Deborah Burnet from the University of Chicago spoke about her research regarding prevention of Childhood Obesity and Diabetes, as well as how to embark upon translational research. Dr. Raoul Wolf from the University of Chicago led Grand Rounds, “From Bench to Bedside with Allergy/Immunology.” Dr. Saul Wiener from the University of Illinois presented his research topic, “Medical Errors and Psychosocial Factors”. Dr. Sara Van Orman from the University of Wisconsin at Madison presented, “Adolescent and College Health.” The conference offered several other workshops including a panel of patients talking about their experiences living with Inflammatory Bowel Disease and transitioning from pediatric to adult providers. The conference also included breakout sessions for medical students: “How to be a Successful MedPeds Applicant: and for residents: “Career and Fellowship Panel.” Lastly, the highlight of the conference was the Resident Vignette Competition. Radhika Dhamija, from Michigan State University, presented “Headache, Heartache, and Limb ache Pneumonia: The protean manifestations of Mycoplasma pneumonia,” and Chrisanne Timpe DuPuis, from University of Minnesota, presented “Pentalogy Of Cantrell: A Coming of Age for Congenital Heart Disease.” The day provided an excellent opportunity for those interested in or already practicing Med-Peds to network and learn about Med-Peds specific topics.

Dr. Rita Rossi-Foulkes is the Program Director of the Internal Medicine and Pediatrics Residency Program at University of Chicago.

CHECK OUT WHAT’S NEW AT WWW.MEDPEDS.ORG!

Check out the NMPRA website at www.medpeds.org where you can find more info regarding:

- Case Competitions
- Advocacy Grants
- Award Opportunities
- Jobs Board
- Fellowship Guide
- 2009 National Conference
- And much more!
AAP Med-Peds Section Corner

ATTENTION SECOND YEAR RESIDENTS!

The Med-Peds Section is looking for a current second year resident to serve as the resident representative for the AAP/ACP Med-Peds Section Executive Committee. This position is a two year commitment that will start in October 2009 and end in October 2011. The Med-Peds Section is dedicated to promoting and enhancing the practice of physicians trained in both specialties. The Section is also committed to advocacy, education, improving communication, and research related to the practice and training of physicians in combined Internal Medicine and Pediatrics. The resident representative responsibilities include developing and promoting activities to address the needs of medical students interested in Med-Peds, residents and fellows in training programs, and Med-Peds physicians who are within 5 years of completing their residency training. For more information, please contact Jackie Meeks (current resident representative) at Jacqueline.P.Meeks@uth.tmc.edu or visit our section website at:

http://www.aap.org/sections/med-peds/

CLINICAL CASE COMPETITION

Med-Peds Clinical Case Competition at the 2009 AAP NCE meeting in Washington, D.C. sponsored by the Med-Peds Section. We will start accepting abstracts during the Spring. However, now is the time to start thinking of cases that you think would be interesting to both internist and pediatricians. Submission details will follow.

JOIN THE MED-PEDS SECTION OF AAP!

Did you know that the Med-Peds Section has a "Job Search Guide" specifically for Med-Peds residents/trained physicians? Did you know that the Med-Peds Section can help you find a mentor who can help you with career goals/plans? The Med-Peds Section exists to serve YOU! As an AAP resident member, the Med-Peds Section (as with all other AAP sections) normally charges residents $10 for section membership. However, for a limited time the Med-Peds Section will be waiving resident membership dues. Be Involved. Join now for FREE! To join, go to the Med-Peds Section website at:

http://www.aap.org/sections/med-peds/

Just click on the "JOIN" tab. You can return the completed application form via fax/email/mail. For more information, feel free to contact Jackie Meeks at: Jacqueline.P.Meeks@uth.tmc.edu or David Kaelber at david.kaelber@case.edu
What a mess it is out there! With all that's going on, it's hard to know what this all means to us.

**Savings.** Though we all really know this already, you can't spend more than you earn. Though our job situation is usually pretty secure, disasters still strike. Making sure that you save a decent percentage (at least 10-20% of your monthly income) is key. I have a rule that at least half of my moonlighting money had to go to saving or paying down loans.

So where do you put this money? Roth IRAs are a good place to put money in for retirement. Money put into these accounts can be used to invest in CDs, bonds, stocks, and mutual funds. Further, they can be withdrawn for a home purchase or other times of need.

Be careful that if you deposit the money into a bank account, that it is not a money market fund. These may not be insured by the FDIC.

**Roth vs Traditional IRA.** These are two very different flavors of retirement accounts which you deposit money for later. The Roth IRA is an after-you-pay-income tax plan which has tax-free withdrawals when you retire. So you pay tax on the money now, not later. The benefit is that hopefully you'll have lots more money in the IRA when you retire so you'll have paid less taxes as doctors, we'll likely have much high tax rates later in life than now. Further, you can only contribute a maximum of $5,000 if you make less than $101,000 annually.

Traditional IRAs are pre-income-tax plans, which can reduce the amount of taxes you pay now, but will pay on all the money you withdraw in retirement. These also have maximum contributions of $5,000 for 2008 and income limits as well.

It's tough to pick between the two and which to pick depends on your personal situation and financial planning.

True savings and checking accounts are insured to $250,000 per depositor and should have the FDIC symbol. Often, online savings accounts at Capital One, HSBC, and other banks have pretty good rates upwards of 3.55%.

**Debt.** It's nearly impossible to avoid and as long as you are judicious, I think you'll be okay. Credit cards debit is bad and needs to be worked off ASAP. Student loan debt can be consolidated to lock in the currently low (and likely falling) interest rates. This will help reduce the amount you pay.

**Mortgages.** So as the market tumbles, homes are likely going to become a good buy. However, you'll likely have to make sure your credit score is good and likely need a larger down payment of up to 20%. Obtaining credit is tough so you'll have to work hard to get a good price on the home. Make sure the home is within your budget and you are comfortable with the price. Shop around to get a decent home loan with appropriate rates and ask for many of the fees charged at closing to be waived. Check out some of the special physician loans that might still be available through Bank of America.

**Stocks.** The pitfall of stocks is that if the company goes bankrupt, the common stockholder gets nothing and you lose it all. If you are not willing to take this risk, then don't buy into individual stocks. The upside is that you'll have a better chance of making more if you buy at the right time with the right company.

**Remember,** neither I nor NMPRA are financial advisors or experts. Consult a financial advisor prior to investing and have advice individualized to your own situation and goals.
Christiana Care Health System and the National Med-Peds Residents' Association Presents:

Welcome to all: Medical Students, Residents & Attending Staff

- Meet friends from surrounding med-peds programs
- Get CME credit while having fun

Free admission, breakfast, lunch, snack

Keynote by:
Kimberly Bates, MD, FAAP, FACP
Clinical Asst. Prof. Medicine & Pediatrics
Ohio State University Med-Peds Chair, Ohio ACP Council of Young Physicians Director, FACES Program

Christiana Care Health System
John H. Ammon Medical Education Building
4755 Ogletown-Stanton Road
Newark, Delaware 19718
Phone: 302-733-2313
Fax: 302-733-4399

Contact E-mail:
Jen Packard, MD, PGY-3
jpackard@christianacare.org

Allen Friedland, MD
afriedland@christianacare.org
Conference Registration

There is no registration fee!!

Christiana Care Health System and the National Med-Peds Residents’ Association

Conference Name: Northeast Med-Peds Meeting 2008
Conference Date: Saturday, April 18, 2009
Location: John H. Ammon Medical Education Center

4755 Ogletwon-Stanton Road
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or
afriedland@christianacare.org

Attendee Information

Name: 
MD or DO: 
Date (m/d/y): 
Medical School (if student):
Med-Peds Program (if resident or faculty):
Office Location (if Attending):
State:
Contact Phone:
Email:

☐ I will need hotel accommodations for Friday, April 17

Status:
☐ Medical Student
☐ Resident
☐ Academic Faculty
☐ Attending Physician
Mark your calendars for next year’s national conference in Washington, DC! Check out the NMPRA website at:

www.medpeds.org

for updates and more information.

SUBMIT AN ARTICLE FOR THE PERSPECTIVE!

To celebrate NMPRA’s new international grant which it will be offering for the first time next year, The Perspective will have a quarterly focus on international rotations. If you have done an international rotation and would like to write an article for publication in The Perspective, contact:

secretary@medpeds.org

Other topics are also welcome, as well as announcements and information pertaining to the Med-Peds community.

HAVE WEB EXPERIENCE? WANT TO GET INVOLVED?

NMPRA is looking for residents interested in helping with web updates. Any level of experience welcome!

Commitment would likely be a few hours a month.

Contact secretary@medpeds.org for more information.