The 2008 edition of Medical Genetics Conference was held in conjunction with the First National Dysmorphology Seminar at the University of Malaya Medical Centre from 12–14 December 2008.

This conference was jointly organised by Genetic Unit, Kuala Lumpur Hospital, Department of Paediatrics, University of Malaya, Malaysian Paediatric Association and College of Paediatrics, Academy of Medicine of Malaysia as well as the newly established Medical Genetics Society of Malaysia. The Medical Genetics Conference with the theme “Cancer Genetics” and the novel 1st National Dysmorphology Seminar attracted much interest with 109 participants.

Prominent speakers in the field of medical genetics were invited to speak on a number of new developments in laboratory as well as clinical genetics. Dr John Harvey, Deputy Director & Head of Molecular Genetics from the Wessex Regional Genetics Laboratory/ National Reference Laboratory Salisbury, United Kingdom was the main plenary speaker while local experts were from the Ministry of Health, universities and the private sector. There were poster sessions, two concurrent sessions and four plenary lectures during this conference that allowed the delegates to learn about the latest clinical trends and developments in the field of medical genetics. A unique feature was the Dysmorphology Club, whereby participants were invited to submit patients with dysmorphic features for discussion and the approach to making a provisional syndromic diagnosis was outlined.

This event brought together diverse genetic health care providers that included clinical and laboratory geneticists, paediatricians, scientists, pathologists and medical laboratory technologists from all over the country and abroad to share their experience and expertise. The 109 attendees consisted of 72 registered participants, 16 speakers and 21 organising committee members, invited guests and volunteers. There were five exhibition booths...
One of the iconic moments of cinematic history was when Arnold Schwarzenegger aka Terminator says “I’m baaaack” in his inimitable Austrian accent. The most recent installment of the seemingly interminable Terminator series of movies has been released, and hit the jackpot at the box office once again. Not many people realise that it has been 25 years since the first Terminator movie came out in 1984. A whole new generation has grown up in that time frame, and in America these young ‘uns have even changed history by voting in the first black President.

What is it about the Terminator movies that captures our imagination? Was it a fantastic performance by a wooden Arnold Schwarzenegger playing a metallic automaton? He even appears in the latest installment, looking like he did 25 years ago, thanks to the magic of digital remastering. But the baton has been passed to a younger actor, and the popularity of the series has outlasted Mr Schwarzenegger.

No, the appeal of Terminator rests in the age-old Frankenstein Complex; that primal fear that Man could be destroyed by his own creation. Somewhere deep within the human psyche is the dark fear that our own creation will one day dominate, judge us less than worth, and perhaps even destroy us.

Frankenstein was an early exploration of that theme, and in the new millennium, Frankenstein the flesh and blood creation has been replaced by the ROBOT, or more to the point, Artificial Intelligence. Will one day these creations of ours be able to think for themselves, and with that new-fangled sentence decide that Mankind is their enemy, and then have the superior force to eliminate us? Like Cybernet and the malevolent Terminators. Be that as it may, in the meantime Artificial Intelligence (AI) serves Man, and fortunately its applications have been largely benevolent.

One specific area of interest to us is the application of AI in medicine. Computers would already have displaced humans as the diagnostic modality of choice. There is no doubt that a depository of facts is essential, which coupled with logical analysis is the root of the scientific diagnostic process. In fact this is exactly what we attempt to teach continuous generations of medical students and doctors.

However woven into the diagnostic process is the use of intuition, the need to collect and collate physical findings, and the ability to discern and follow leads that are sometimes not necessarily logical. And the ability to learn from previous experiences.

These characteristically human abilities are, for the moment, beyond the ability of the computer. The operative phrase here being “FOR THE MOMENT”, because with the exponential burst in computing power and the increasing ability of programmers to mimic human thought processes, it is not impossible that within the next few decades we will have computers that can think like human beings.

It is interesting to note that the process that mimics the human thinking process is called ‘Fuzzy Logic’; that speaks volumes about the human brain.

An example of the triumph of the computer over Man is in the area of Chess. Intuition has always been what separates the brilliant chess player from the merely good. Chess-play programming has reached the level where computers can make decisions that appear intuitive. Kasparov was the last Chess Grandmaster to consistently beat the computer. But the computer came back in force, and an upgraded version of Deep Blue was able to beat Kasparov in 1997, the first time in history that a computer beat a reigning World Champion in Chess. And after that there has been no turning back.

So will the computer replace the human doctor one day?

Will people have the option of sitting in front of a terminal, proceed to enter their complaints, undergo an automated scan, or blood test, or whatever measurements the computer may need, and then have the computer arrive at a diagnosis and prescribe the treatment?

The diagnostic ability required will very likely be achieved in a matter of time, but the therapeutic component will be more challenging. Prescriptions will not be a problem, but treatment requiring complicated procedures will still require human hands, with robotic applications serving as tools but unlikely to independently carry out the procedures. At least not FOR THE MOMENT.

Furthermore the whole process may be devoid of empathy, support and compassion ie the ‘human touch’. However for minor illnesses many patients may be willing to forgo that in return for the efficiency of an AI system. And who is to say that a human doctor would deliver the ‘human touch’ with any consistency?

So that leaves us with the last bastion of humanity – the ability to feel.

We are all familiar with Lieutenant Commander Data, that sentient android on Star Trek’s USS Enterprise that/who was on a journey to understand, and ultimately learn, this human trait.

Can sheer computing power and clever and innovative programming create a semblance of emotions. After all human beings wear masks and often trick each other with feigned emotions. So wouldn’t a Robot be able to achieve that illusion, and immeasurably more efficiently?

What is real, or not real? That may depend less on the intrinsic nature of the thing perceived, but more on the interpretation of the perceiver. So, perhaps our greatest fear should not be that the Machine will replace Man, but that we are most of the time functioning at the level of the machine.

The day will certainly come when Artificial Intelligence will be able to reproduce human thought processes, and appear to express emotions, and to all intents and purposes even seem to feel them. And when that happens, what is to differentiate Artificial Intelligence from Natural Intelligence. What is man, that thou shouldst magnify him? and that thou shouldst set thine heart upon him? Job 7:17 (King James Bible)

Perhaps the final answer to what makes Man unique is his ability to be aware of a greater reality than this physical world. That noble spirit within that is a mirror to a universal Loving Force. A restless inner yearning that intimates to us that our journey is not ended when we cease to function biologically. And that perhaps is the true reason why we need not fear that Machines will replace Man. For the machine is made in our image, but we are modeled on something Higher.

Soo Thian Lian
President 2007 – 2009
Medical Genetics Conference 2008 & 1st National Dysmorphology Seminar

and the poster session attracted 12 submissions.

Refurbished auditorium
The opening ceremony, officiated by Professor Dr Patrick Tan, the acting dean, was held at the newly refurbished Clinical Auditorium, UMMC. Dr Alan Khoo from the Institute for Medical Research (IMR) kicked off the conference with his plenary lecture entitled “Genetics and epigenetics of cancer.” This was followed by tea and the concurrent sessions of Dysmorphology and Cancer Genetics continued at the Dewan Jemerlang and Dewan Bidara, respectively. Professor MK Thong spoke on ‘Introduction to Dysmorphology & Birth Defects’ while Assoc Prof Hany Ariffin spoke on ‘Genetic aspects of childhood cancers’.

On the following days, Dr John Harvey gave two plenary lectures. The topics were ‘The genetic diagnosis of cancer in 2008’ as well as ‘Molecular basis of dysmorphology’. Over the next 2 days, numerous local speakers presented their talks. These included Assoc. Prof. Nur Aishah taib (Hereditary breast cancer), Dr T. Eswary from the Cancer Research Initiatives Foundation (Cancer genetics – Malaysian experience), Dr Wendy Lim (Hereditary colorectal cancers), Dr G. Muralitharan (Genetics of ovarian cancer), Dr V. Abhimanyu (Clinical application of translational genomics), Dr Zubaidah (Microarray (Clinical application of translational genomics), Dr Zhubaidah (Microarray analysis in haematological cancers), Dato Dr Chang Kian Meng (Molecular genetics and targeted therapy). For the dysmorphology seminar, the speakers were Assoc Prof Dr Zarina Dato’ Abdul Latiff (Family tree and risk assessment and Chromosomal disorders), Dr Keng Wee Teik (Approach to dysmorphology and Management and Health surveillance in children with syndromes’), Dr Ng Lock Hock (Dysmorphology in inborn errors of metabolism), Dr Roziana Ariffin (Cytogenetics & molecular investigations in dysmorphology) and Dr Choy YS (Psychosocial and ethical issues in dysmorphology). Professor Thong Meow Keong presented the fourth plenary lecture on ‘Genetic counselling’ and coordinated the dysmorphology club session where 10 different cases were presented. The medical officers and paediatricians participating by presenting known syndromes to highlight the salient features and this was followed by presentation of unknown or ‘rare’ cases in the local population. Demonstration on the use of commercial dysmorphology databases such as the POSSUM (Pictures of Standardised Syndromes and Unknown Malformations) from Melbourne Australia as well as the Winter-Baraitser (previously London) Dysmorphology database was shown. The strengths and limitations on the use of these databases were highlighted.

Evening Talk & Posters
An evening dinner talk was held at the Boulevard Hotel Kuala Lumpur on “Array comparative genomic hybridisation” (CGH) on the 13 December 2009 in conjunction with the conference.

The four best posters chosen by the judges were awarded RM200.00 each. The titles of the winning posters and their lead authors are: “Bladder cancer: mdm amplification exclusive of mdm2 & tp53” by Dr Abhimanyu and his team from UPM; “Common chromosomal disorder: a review, HKL 2003-2007” by Dr Roziana et al, Hospital Kuala Lumpur; “Assessment of risk factors for recurrent and metastatic breast cancer using Her2/neu gene amplification by fluorescence in situ hybridisation analysis” by Nam Hui Yin and her team from UMMC and “Inborn errors of metabolism diseases in Malaysia: Laboratory aspects of aminoacidemia and organic aciduria” by Madam Chen Bee Chin and her team from Hospital Kuala Lumpur, respectively.

The closing ceremony was officiated by the Deputy Director-General of Health, Dato Dr Noor Hisham Abdullah. He showed keen interest in the development of medical genetics in Malaysia and expressed his hope that all the stakeholders and research units, be it from the Ministry of Health, the universities and private centres and non-governmental organisations can come and work together and develop the field of medical genetics for the benefit of the country. Professor Thong Meow Keong announced that the Medical Genetics Society of Malaysia was recently established to fulfill the aims of this vision.

The feedback received was the 3-day Medical Genetics conference 2008 and the First National Dysmorphology Seminar had been a success and educational. More such meetings will be held in the future.

Prof Thong Meow Keong
THONGMK@ummc.edu.my
Roziana Ariffin
Co-organisers
Medical Genetics Conference 2008 & 1st National Dysmorphology Seminar

MPA Tagline
In previous issues of the Berita MPA, we have asked for suggestions from members for the MPA tagline or motto. As we only received one suggestion, the committee members decided to brainstorm on a Sunday morning and came up with the following in no particular order of preference:

• Building the foundation for our children’s future
• Meeting our children’s needs
• Working for children, the nation’s future
• Working for the health of our children

If you have strong (or any) views regarding the above, please indicate your choice by emailing the secretariat at mpaeds@gmail.com, the president at mtkinabalu@yahoo.com or the editor at dr.zul.ismail@gmail.com

Executive Committee
Cell Phones Spreading Superbugs in Hospitals
by David Gutierrez, Naturalnews.com

The cellular phones that hospital doctors and nurses bring to work are widely contaminated with dangerous pathogens, even when the health workers wash their hands regularly, a new study has found.

“Our results suggest cross-contamination of bacteria between the hands of health care workers and their mobile phones,” wrote the researchers from Turkey’s Ondokuz Mayis University in the Annals of Clinical Microbiology and Antimicrobials.

“These mobile phones could act as a reservoir of infection which may facilitate patient-to-patient transmission of bacteria in a hospital setting.”

Researchers tested the dominant hands and mobile phones of 200 doctors and nurses in hospital intensive care units and operating rooms for bacteria capable of causing illness. While most of the health care workers followed hand washing guidelines, 95 percent of their phones tested positive for at least one dangerous form of bacteria. Almost 35 percent of phones contained two bacterial strains, while more than 11 percent contained three or more.

A full 12.5 percent of phones tested positive for methicillin-resistant Staphylococcus aureus (MRSA).

MRSA is an antibiotic-resistant variety of the common S. aureus bacteria that is responsible for staph infections. Due to its drug resistant properties, MRSA is much more difficult to treat than a regular staph infection and is significantly more likely to cause dangerous complications. If MRSA invades deep tissue or spreads beyond the skin to other organs, complications can include skin necrosis, disfiguring abscesses, blood infections, pneumonia and even death. It is particularly dangerous to those in a weakened state, such as hospital patients.

The prevalence of the bacteria is on the rise, with the Centers for Disease Control and Prevention (CDC) estimating that the rate of hospital staph infections caused by MRSA to have risen from 2 percent in 1974 to 63 percent in 2004. MRSA is now considered responsible for a full 60 percent of all infections in hospitals.

CDC statistics record 94,000 MRSA infections per year in the United States, leading to 19,000 deaths – more than the 12,500 deaths caused by AIDS in 2005. According to these figures, 31.8 out every 100,000 U.S. residents contract a MRSA infection each year. These figures were roughly in line with a nationwide survey conducted by the Association for Professionals in Infection Control and Epidemiology in 2007, which estimated that 46 out of every 1,000 patients in medical facilities contracts an MRSA infection, or 1.2 million per year.

Prior studies have found MRSA contamination on electronic devices such as keyboards, but the current study may be the first to look at mobile phones specifically.

The researchers attributed the high rate of cell phone contamination to the fact that only one in 10 health care workers reported cleaning their phone regularly. “Mobile phones are widely used as nonmedical portable electronic devices and (are) in close contact with the body,” the authors wrote. “The mobile phones are used routinely all day long but not cleaned properly, as health care workers (may not) wash their hands as often as they should.”
Vaccine & Infection Snippets

Congratulations
To Dato’ Dr Amar Singh a/l H. Surjan Singh from Ipoh on being conferred the Darjah Dato Paduka Mahkota Perak (DPMP) that carries the title Dato’ by the Sultan of Perak on April 19, 2009.

10-Valent PCV, Synflorix, approved by European Authority
GlaxoSmithKline’s (GSK) 10-valent pneumococcal conjugate vaccine, Synflorix, received final approval from The European Commission on March 31st. The decision follows a January 2009 recommendation for approval by the European Medicines Agency (EMEA). The vaccine includes coverage of serotypes 1, 5 and 7F in addition to the seven serotypes in the PCV7 formulation (brand name Prevenar, Wyeth) and is indicated to protect children between 6 weeks and 2 years of age against invasive pneumococcal disease and acute otitis media.

Impact of routine immunization with 7-valent pneumococcal conjugate vaccine (PCV) reviewed
In a review published in the journal Vaccine, Bechini et al summarize the data available to date in countries routinely immunizing infants with PCV. The authors conclude that the 7-valent PCV showed high efficacy against invasive pneumococcal diseases caused by vaccine serotypes in children under age two. Studies have suggested that indirect population benefit of vaccination outweighs the direct protection conferred on immunized individuals against invasive pneumococcal disease (IPD). A small increase in the incidence of non-vaccine serotype IPD as a proportion of all disease has been observed in some populations, but is far below the overall reduction in absolute cases seen with widespread use of PCV. The authors conclude by comparing detection methods such as PCR and culture-based methods and comment briefly on the status of second generation PCVs currently in the vaccine pipeline.

Intercell AG begins Phase I trial of pneumococcal vaccine
Earlier this week, Austrian company Intercell announced that a Phase I clinical trial of their new vaccine candidate against the pneumococcus, IC47, has gotten underway. Three highly conserved surface proteins from Streptococcus pneumoniae make up the vaccine and have the potential to protect broadly across the more than 90 serotypes of pneumococcus. Intercell’s vaccine candidate has been developed through a collaboration with PATH, an international global health nonprofit organization based in the US, under an agreement which sees Intercell providing the vaccine to low-income countries at long-term sustainable prices.

New study shows that many serious diseases are significantly underfunded
Diseases endemic to developing countries are killing millions of people, but remain significantly underfunded, according to a worldwide survey of funding for neglected diseases. Commissioned by the Bill and Melinda Gates Foundation and conducted by researchers from The George Institute in Australia, the study estimated that $2.5 billion was spent globally in 2007 on research and developing drugs for tropical diseases. HIV/AIDS, TB and malaria accounted for 80% of the funding. In contrast, pneumonia and diarrheal diseases collectively received less than 6% of these funds. The authors note that “Investment decisions are not only influenced by scientific or epidemiological considerations, but may also be influenced by factors such as the presence of advocacy and fundraising groups; by funder perceptions or preferences; or by the presence of policy frameworks and funding mechanisms that prioritize specific diseases.” The study also revealed that public and philanthropic donors collectively invested 90%, of the total funding.

Study examines association of pneumococcal serotype with risk of severe or fatal outcomes
In the Pediatric Infectious Disease Journal, Ruckinger et al reported that serotype 7F accounted for a higher risk of severe and fatal outcomes than other serotypes of Streptococcus pneumoniae. The study examined data on 494 children under 16 years of age hospitalized for invasive pneumococcal disease (IPD) in pediatric hospitals in Germany between 1997 and 2003. 17% of the children suffered a severe outcome (including death) with a case fatality rate of 5.3%. Children infected with the 7F pneumococcal serotype had the highest serotype-specific case-fatality rate (14.8%) and the highest rate of severe outcomes (40.7%). When comparing serotype 7 to all other serotypes, the odds ratio was 4.3 for fatal outcome and 4.0 for serious outcomes. These results suggest that the serotype-specific risk for severe or fatal outcome is an important factor in describing the epidemiology of IPD and in optimizing treatment and prevention measures.
Paediatric Cardiologists Meet in Cairns
21 – 26 June 2009, Australia

The 5th World Congress of Pediatric Cardiology & Cardiac Surgery (PCCS) was held in the quiet tropical Australian beach town of Cairns from 21 to 26 June 2009. Despite the novel influenza A(H1N1) swine (Mexican) flu pandemic, 2285 delegates attended this get-together of paediatric cardiologists, cardiac surgeons, anaesthesiologists, intensivists, anatomists and embryologists, perfusionists, nurses, technicians and others with an interest in children with heart disease. Out of that number, there were 35 Malaysians, some with poster presentations, some involved in live telecasts with our own National Heart Institute (IJN) while most attended to update themselves on the very latest every 4 years.

The usual talks and demonstrations on interventions and cardiac surgery procedures dominated a fair bit of the Congress. This year there was even a talk by Retired General Jim Molan who served in Afghanistan to give a perspective of a leader who has to make decisions under stress and duress. This was then cleverly extrapolated to the world of post-operative intensive care where decisions are made based on whatever information is at hand and under physical and mental fatigue and stress.

Organised with the partnership of the Pediatric Interventional Cardiac Symposium (PICS), World Society for Pediatric and Congenital Heart Surgery (WSPCHS), Pediatric & Congenital Electrophysiology Society (PACES), Congenital Cardiac Anesthesia Society, International Society for Adult Congenital Heart Disease, Pediatric Cardiac Intensive Care Society and Pedirhythm, the scientific content covered every known range of paediatric cardiology and cardiac surgery including embryology to include foetal cardiology. There were so many simultaneous symposia to choose from that not many delegates were seen at the beach or public swimming pool. Typical of the interventionists, the PICS group started their programme a day earlier with live telecasts of procedures done in India, Kuala Lumpur (thanks to Dr Mazeni Alwi from IJN who has single-handedly managed to put Malaysia on the Paediatric Cardiology world map) and Saudi Arabia. Their daily sessions also started at 6.30am (you read that time right!). As usual, the greatest breakthroughs were in imaging with the use of MRI and newer CT techniques in addition to newer intervention devices. The exhibition space was covered by imaging and intervention companies with a smattering of pharmaceutical and educational material distributors.

Academic Expectations And Perfect Venue

There was no doubt that the Congress met the academic expectations of delegates from various subspecialties and the new Cairns Convention Centre in this north Queensland town provided the perfect venue for this exchange to take place. At tea and lunch (which were provided, unlike previous World Congresses) breaks, delegates were seen in and out of the convention centre enjoying the friendship and discussion as well as the sunshine.

With the perfect venue, a solid scientific programme, a dedicated team under the leadership of Prof James Wilkinson from Melbourne and Dr Peter Pohlner from Brisbane along with the scientific committee chairmen Prof Dan Penny (Melbourne) and Assoc Prof David Winlaw (Sydney), this congress has managed to draw experts from the whole world to this restive coastal resort despite the threat of a pandemic and travel restrictions.

A(H1N1)? The front page news in the Cairns Post on Tuesday, 23 June, read “200 cases and rising”, but it was about pertussis! One small column on an obscure inside page was about a prisoner who caught the novel flu virus. The 6th World Congress due in Cape Town on 17-22 February 2013 will surely be anticipated. Hopefully the organisers will still include lunch and tea in the package! 😝

Zulkifli Ismail
dr.zul.ismail@gmail.com
Letter to the Editor

Below is a statement from MPA and College of Paediatrics, Academy of Medicine of Malaysia (AMMCOP) on soy formula, which was sent to editors of all major newspapers in the country.

Dear Sir,

We are concerned with the recent advertisement in the media about the indications and benefits of soy formula, particularly in young infants.

We, as health care professionals, would like to give a balanced view on the indications of soy formula in young infants supported by latest scientific findings.

Breast feeding is the best nutrition to meet the needs of growing infants. If breast feeding is not feasible or possible, then an infant formula based on cow milk protein is recommended. Soy protein is derived from plant. The quality of its protein is generally considered to be inferior to human milk or cow milk’s protein. It is lacking in certain amino acid that is essential for the growth of young children. In addition, it also contains excessive amount of aluminium and phyto-oestrogens. The long term effect of these two substances on the health of human body at present is still not very clear.

Many health-care professional organizations (including American Academy of Pediatrics, European Society of Pediatric Gastroenterology and Nutrition, and Australian Medical Association) recommended that soy formula is not to be given to premature infants or infants younger than 6 months’ of age.

The only absolute indications for taking soy formula in children are a very rare metabolic condition called galactosaemia, as well as isolated lactose-intolerance.

Many doctors in primary care often advise parents who have young children suffering from acute diarrhoea to switch to soy formula temporarily. Their reason for doing so is that soy formula can reduce the duration of diarrhoea. We would like to point out that there is no scientific reason to support this claim. World Health Organization (WHO) states that the most important and safe aspect of the management of acute diarrhoea is to provide adequate fluid and electrolytes during the acute diarrhoea episode.

There is no scientific evidence to suggest that soy formula is beneficial in young infants who suffer from excessive colic. Colic is a harmless condition that generally disappears on its own without treatment.

Soy formula is also not beneficial in infants who have recurrent wheeze or asthma.

Soy formula is also not indicated in the management or prevention of cow milk protein allergy in infants younger than 6 months of age. But soy formula can be used in infants older than 6 months with cow milk protein allergy. However, in our experience, true cow milk protein allergy is uncommon in clinical practice.

Thank you,

Yours truly,

From,

Professor Dr Lee Way Seah
President, College of Paediatrics
Academy of Medicine of Malaysia

Dr Soo Thian Lian
President, Malaysian Paediatric Association; and

Dr Tee Ee Siong
President, Nutrition Society of Malaysia
CDC Issues Interim Recommendations for the Use of Influenza Antiviral Medications in the Setting of Oseltamivir Resistance among Circulating Influenza A (H1N1) Viruses, 2008-09 Influenza Season

Although influenza activity is low in the United States to date, preliminary data from a limited number of states indicate that the prevalence of influenza A (H1N1) virus strains resistant to the antiviral medication oseltamivir is high. Therefore, CDC is issuing interim recommendations for antiviral treatment and chemoprophylaxis of influenza during the 2008-09 influenza season. When influenza A (H1N1) virus infection or exposure is suspected, oseltamivir is the recommended antiviral medication. Local influenza surveillance data and laboratory testing can help with physician decision-making regarding the choice of antiviral agents for their patients. The 2008-09 influenza vaccine is expected to be effective in preventing or reducing the severity of illness with currently circulating influenza viruses, including oseltamivir-resistant influenza A (H1N1) virus strains. Since influenza activity remains low and is expected to increase in the weeks and months to come, CDC recommends that influenza vaccination efforts continue.

Background
Influenza A viruses, including two subtypes (H1N1) and (H3N2), and influenza B viruses, currently circulate worldwide, but the prevalence of each can vary among communities and within a single community over the course of an influenza season. In the United States, four prescription antiviral medications (oseltamivir, zanamivir, amantadine and rimantadine) are approved for treatment and chemoprophylaxis of influenza. Since January 2006, the neuraminidase inhibitors (oseltamivir, zanamivir) have been the only recommended influenza antiviral drugs because of widespread resistance to the adamantanes (amantadine, rimantadine) among influenza A (H3N2) virus strains. The neuraminidase inhibitors have activity against influenza A and B viruses while the adamantanes have activity only against influenza A viruses. In 2007-08, a significant increase in the prevalence of oseltamivir resistance was reported among influenza A (H1N1) viruses worldwide. During the 2007-08 influenza season, 10.9% of H1N1 viruses tested in the U.S. were resistant to oseltamivir.

Influenza activity has been low thus far this season in the United States. As of December 19, 2008, a limited number of influenza viruses isolated in the U.S. since October 1 have been available for antiviral resistance testing at CDC. Of the 50 H1N1 viruses tested to date from 12 states, 98% were resistant to oseltamivir, and all were susceptible to zanamivir, amantadine and rimantadine. Preliminary data indicate that oseltamivir-resistant influenza A (H1N1) viruses do not cause different or more severe symptoms compared to oseltamivir sensitive influenza A (H1N1) viruses. Influenza A (H3N2) and B viruses remain susceptible to oseltamivir. The proportion of influenza A (H1N1) viruses among all influenza A and B viruses that will circulate during the 2008-09 season cannot be predicted, and will likely vary over the course of the season and among communities. Oseltamivir-resistant influenza A (H1N1) viruses are antigenically similar to the influenza A (H1N1) virus strain represented in 2008-09 influenza vaccine, and CDC recommends that influenza vaccination efforts continue as the primary method to prevent influenza.

Oseltamivir resistance among circulating influenza A (H1N1) virus strains presents challenges for the selection of antiviral medications for treatment and chemoprophylaxis of influenza, and provides additional reasons for clinicians to test patients for influenza virus infection and to consult surveillance data when evaluating persons with acute respiratory illnesses during influenza season. These interim guidelines provide options for treatment or chemoprophylaxis of influenza in the United States if oseltamivir-resistant H1N1 viruses are circulating widely in a community or if the prevalence of oseltamivir resistant H1N1 viruses is uncertain.

Interim Recommendations
Persons providing medical care for patients with suspected influenza or persons who are candidates for chemoprophylaxis against influenza should consider the following guidance for assessing and treating patients during the 2008-09 influenza season (see Guidance Table below):

1) Review local or state influenza virus surveillance data weekly during influenza season, to determine which types (A or B) and subtypes of influenza A virus (H3N2 or H1N1) are currently circulating in the area. For some communities, surveillance data might not be available or timely enough to provide information useful to clinicians.

2) Consider use of influenza tests that can distinguish influenza A from influenza B.
   a. Patients testing positive for influenza B may be given either oseltamivir or zanamivir (no preference) if treatment is indicated.
   b. At this time, if a patient tests positive for influenza A, use of oseltamivir should be considered if treatment is indicated. Oseltamivir should be used alone only if recent local surveillance data indicate that circulating viruses are likely to be influenza A (H3N2) or influenza B viruses. Combination treatment with oseltamivir and rimantadine is an acceptable alternative, and might be necessary for patients that cannot receive zanamivir, (e.g., patient is <7 years old, has chronic underlying airways disease, or cannot use the zanamivir inhalation device), or...
Influenza Antiviral Medications in the Setting of Oseltamivir Resistance

**Recommendations for the Use of Oseltamivir in the Setting of Oseltamivir Resistance**

CDC issues interim recommendations for the use of oseltamivir among circulating influenza A (H1N1) viruses, Oseltamivir or zanamivir (no preference). Influenza A (H1N1) viruses are antigenically similar to the influenza A(H1N1) viruses represented in the vaccine, and vaccination should continue to be considered the primary prevention strategy regardless of oseltamivir sensitivity. Information on antiviral resistance will be updated in weekly surveillance reports (available at http://www.cdc.gov/flu/weekly/fluactivity.htm).

For more information on antiviral medications and additional considerations related to antiviral use during the 2009 influenza season, visit http://www.cdc.gov/flu/professionals/antivirals/index.htm

### TABLE

**Interim recommendations for the selection of antiviral treatment using laboratory test results and viral surveillance data, United States, 2008-2009 season†**

<table>
<thead>
<tr>
<th>Rapid antigen or other laboratory test</th>
<th>Predominant virus(es) in community</th>
<th>Preferred medication(s)</th>
<th>Alternative (combination antiviral treatment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not done or negative, but clinical suspicion for influenza</td>
<td>H1N1 or unknown</td>
<td>Zanamivir</td>
<td>Oseltamivir + Rimantadine*</td>
</tr>
<tr>
<td>Not done or negative, but clinical suspicion for influenza</td>
<td>H3N2 or B</td>
<td>Oseltamivir or Zanamivir</td>
<td>None</td>
</tr>
<tr>
<td>Positive A</td>
<td>H1N1 or unknown</td>
<td>Zanamivir</td>
<td>Oseltamivir + Rimantadine*</td>
</tr>
<tr>
<td>Positive A</td>
<td>H3N2 or B</td>
<td>Oseltamivir or Zanamivir</td>
<td>None</td>
</tr>
<tr>
<td>Positive B</td>
<td>Any</td>
<td>Oseltamivir or Zanamivir</td>
<td>None</td>
</tr>
<tr>
<td>Positive A+B**</td>
<td>H1N1 or unknown</td>
<td>Zanamivir</td>
<td>Oseltamivir + Rimantadine*</td>
</tr>
<tr>
<td>Positive A+B**</td>
<td>H3N2 or B</td>
<td>Oseltamivir or Zanamivir</td>
<td>None</td>
</tr>
</tbody>
</table>

‡ Amantadine can be substituted for rimantadine but has increased risk of adverse events. Human data are lacking to support the benefits of combination antiviral treatment of influenza; however, these interim recommendations are intended to assist clinicians treating patients who might be infected with oseltamivir-resistant influenza A (H1N1) virus.

** Positive A+B indicates a rapid antigen test that cannot distinguish between influenza and influenza B viruses.

† Influenza antiviral medications used for treatment are most beneficial when initiated within the first two days of illness. Clinicians should consult the package insert of each antiviral medication for specific dosing information, approved indications and ages, contraindications/warnings/precautions, and adverse effects.

Enhanced surveillance for influenza antiviral resistance is ongoing at CDC in collaboration with local and state health departments. Clinicians should remain alert for additional changes in recommendations that might occur as the 2008-09 influenza season progresses. Oseltamivir resistant influenza oseltamivir is unavailable. Amantadine can be substituted for rimantadine if rimantadine is unavailable.

c. If a patient tests negative for influenza, consider treatment options based on local influenza activity and clinical impression of the likelihood of influenza. Because rapid antigen tests may have low sensitivity, treatment should still be considered during periods of high influenza activity for persons with respiratory symptoms consistent with influenza who test negative and have no alternative diagnosis. Use of zanamivir should be considered if treatment is indicated. Combination treatment with oseltamivir and rimantadine (substitute amantadine if rimantadine unavailable) is an acceptable alternative. Oseltamivir should be used alone only if recent local surveillance data indicates that circulating viruses are likely to be influenza A(H3N2) or influenza B viruses.

d. If available, confirmatory testing with a diagnostic test capable of distinguishing influenza caused by influenza A (H1N1) virus from influenza caused by influenza A (H3N2) or influenza B virus can also be used to guide treatment. When treatment is indicated, influenza A (H3N2) and influenza B virus infections should be treated with oseltamivir or zanamivir (no preference). Influenza A (H1N1) virus infections should be treated with zanamivir or combination treatment with oseltamivir and rimantadine is an acceptable alternative.

3) Persons who are candidates for chemoprophylaxis (e.g., residents in an assisted living facility during an influenza outbreak, or persons who are at higher risk for influenza-related complications and have had recent household or other close contact with a person with laboratory confirmed influenza) should be provided with medications most likely to be effective against the influenza virus that is the cause of the outbreak, if known. Respiratory specimens from ill persons during institutional outbreaks should be obtained and sent for testing to determine the type and subtype of influenza A viruses associated with the outbreak and to guide antiviral therapy decisions. Persons whose need for chemoprophylaxis is due to potential exposure to a person with laboratory-confirmed influenza A (H3N2) or influenza B should receive oseltamivir or zanamivir (no preference). Zanamivir should be used when persons require chemoprophylaxis due to exposure to influenza A (H1N1) virus. Rimantadine can be used if zanamivir use is contraindicated.
What’s New in UTI in children? 
The NICE way

NICE guidelines August 2007 from NHS United Kingdom is timely and a more discerning way of managing urinary tract infection (UTI) in children. The key difference in management is identifying children with atypical or recurrent UTI which may reflect a more sinister underlying pathology such as a neurogenic bladder, posterior urethral valves or high grade vesicoureteric reflux. Hence, more invasive and expensive imaging is confined to a target group of children at risk rather than a well grown, thriving infant with a one-off, uncomplicated UTI.

Table 1: Clinical Presentation of UTI according to age groups

<table>
<thead>
<tr>
<th>Test</th>
<th>Infants &lt; 3 months</th>
<th>Preverbal children &gt;3 months</th>
<th>Verbal children &gt; 3 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most common</td>
<td>Fever</td>
<td>Abdominal pain</td>
<td>Frequency, dysuria, Dysfunctional voiding, abdominal pain</td>
</tr>
<tr>
<td>Vomiting</td>
<td>Lethargy/ irritability</td>
<td>Loin tenderness, vomiting, Poor feeding</td>
<td></td>
</tr>
</tbody>
</table>

Collection of urine

- A clean catch specimen is recommended method. When it is not possible to collect urine by non-invasive methods, catheterization or suprapubic aspiration (ultrasound guided) should be used.

Table 2: Urine testing strategies with Urine dipsticks

<table>
<thead>
<tr>
<th>Test</th>
<th>Leucoesterase positive</th>
<th>Leucoesterase negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>UTI Start antibiotics</td>
<td>Start antibiotics and then review culture</td>
<td></td>
</tr>
<tr>
<td>Infection outside urinary tract No antibiotics unless UTI symptoms</td>
<td>No UTI No urine culture</td>
<td></td>
</tr>
</tbody>
</table>

Table 3: Pertinent to identify Atypical or recurrent UTI

<table>
<thead>
<tr>
<th>History</th>
<th>Physical examination</th>
<th>Investigations</th>
<th>UTI manifestation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor urine flow Septicaemic/Ill</td>
<td>High serum creatinine</td>
<td>Non E.coli infections</td>
<td></td>
</tr>
<tr>
<td>Recurrent UTI Palpable bladder/ kidneys/spinal bifida/ lower limb abnormality</td>
<td>Hydronephrosis on ultrasound</td>
<td>Failure to respond to suitable antibiotics within 48 hours</td>
<td></td>
</tr>
</tbody>
</table>

Management Of UTI
- consists of antibiotic treatment of UTI, antibiotic prophylaxis, imaging and follow up.

Table 4: Antibiotic treatment of UTI

<table>
<thead>
<tr>
<th>Infection</th>
<th>Preferred Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>UTI (Acute cystitis)</td>
<td>Oral Trimethoprim; nitrofurantoin, cephalosporin or amoxicillin (3 days in NICE guidelines, but usually given for 1 week in our local practice)</td>
</tr>
<tr>
<td>Upper UTI (Acute pyelonephritis)</td>
<td>IV cefotaxime or ceftriaxone for 2-4 days and then oral for a total of 10 days</td>
</tr>
<tr>
<td>Asymptomatic bacteriuria</td>
<td>No treatment required</td>
</tr>
</tbody>
</table>

Table 5: Antibiotic prophylaxis

<table>
<thead>
<tr>
<th>Category</th>
<th>Antibiotic prophylaxis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st UTI</td>
<td>No</td>
</tr>
<tr>
<td>Recurrent symptomatic UTI VUR of at least Grade III</td>
<td>Consider prophylaxis (trimethoprim, nitrofurantoin or cephalosporin ON)</td>
</tr>
<tr>
<td>MCUG procedure</td>
<td>Yes, antibiotic prophylaxis for 3 days with MCUG done on Day 2</td>
</tr>
</tbody>
</table>

Current evidence has narrowed the indications for imaging targeting infants at risk with atypical or recurrent UTI.

Table 6: Indications for imaging studies

<table>
<thead>
<tr>
<th>Test</th>
<th>6 months – 3 years old</th>
<th>3 years and older</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infants &lt; 6 months Uncomplicated UTI</td>
<td>Ultrasound Yes</td>
<td>Ultrasound No</td>
</tr>
<tr>
<td>Atypical &amp; recurrent UTI</td>
<td>DMSA No</td>
<td>DMSA No</td>
</tr>
<tr>
<td>UTI manifestation</td>
<td>MCUG No</td>
<td>MCUG No</td>
</tr>
</tbody>
</table>

Table 7: Follow up

<table>
<thead>
<tr>
<th>Category</th>
<th>Findings</th>
<th>Follow up plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imaging abnormal VUR</td>
<td>Surgical management not routinely recommended. Considered in recurrent febrile UTI. Antibiotic prophylaxis if &gt; Grade III VUR.</td>
<td></td>
</tr>
<tr>
<td>Minor Unilateral defect</td>
<td>No long term follow up unless recurrent UTI or risk of hypertension</td>
<td></td>
</tr>
<tr>
<td>Bilateral renal defect</td>
<td>Paediatric Nephrologist</td>
<td></td>
</tr>
</tbody>
</table>

Finally, parents and caregivers should be given the appropriate advice and information on UTI.

Indra Ganesan
Likas Women’s and Children’s Hospital, Sabah indra.ganesan@mac.com

References
Varicella vaccine is given by the private sector in Malaysia and there is still some uncertainty regarding the use of one or two doses for children. Initial recommendation was a single 0.5 mL dose for children aged up to 13 years. ACIP has reviewed data on this issue and the updated recommendations are as follows with some introductory notes:

**Summary of Rationale for Varicella Vaccination**

Varicella vaccine is an effective prevention tool for decreasing the burden attributable to varicella disease and its complications in the United States. In the prevaccine era, varicella was a childhood disease with >90% of the 4 million cases, two thirds of approximately 11,000 hospitalizations, and approximately half of 100-150 annual deaths occurring among persons aged <20 years. Single-antigen varicella vaccine is licensed for use among healthy persons aged >13 months, and the combination MMRV vaccine is licensed for use in healthy children aged 12 months-12 years. Prelicensure and postlicensure studies have demonstrated that 1 dose of single-antigen varicella vaccine is approximately 85% effective in preventing varicella. Breakthrough varicella disease that occurs after vaccination frequently is mild and modified. Varicella vaccine is >95% effective in preventing severe varicella disease. Since implementation of the varicella vaccination program in 1995, varicella incidence, hospitalizations, and deaths have declined substantially. MMRV was licensed on the basis of immunological noninferiority to its vaccine antigenic components. Initial varicella vaccine policy recommendations were for 1 dose of varicella vaccine for children aged 12 months-12 years and 2 doses, 4-8 weeks apart, for persons aged >12 years. In June 2006, ACIP approved a routine 2-dose recommendation for children. The first dose should be administered at age 12-15 months and the second dose at age 4-6 years.

The rationale for the second dose of varicella vaccine for children is to further decrease varicella disease and its complications in the United States. Despite the successes of the 1-dose vaccination program in children, vaccine effectiveness of 85% has not been sufficient to prevent varicella outbreaks, which, although less than in the prevaccine era, have continued to occur in highly vaccinated school populations. Breakthrough varicella is contagious. Studies of the immune response after 1 and 2 doses of varicella vaccine demonstrate a greater-than-tenfold boost in GMTs when measured 6 weeks after the second varicella vaccine dose. A higher proportion (>99%) of children achieve an antibody response of >5 gpELISA units after the second dose compared with 76%-85% of children after a single dose of varicella vaccine. The second dose of varicella vaccine is expected to provide improved protection to the 15%-20% of children who do not respond adequately to the first dose. Data from a randomized clinical trial conducted postlicensure indicated that vaccine efficacy after 2 doses of single-antigen varicella vaccine in children (98.3%; CI = 97.3%-99.0%) was significantly higher than that after a single dose (94.4%; CI = 92.9%-95.7%). The risk for breakthrough disease was 3.3-fold lower among children who received 2 doses than it was among children who received 1 dose. How this increase in vaccine efficacy (typically higher than observed under field conditions) will translate into vaccine effectiveness under conditions of community use will be an important area of study.

The recommended ages for routine first (at age 12-15 months) and second (at age 4-6 years) doses of varicella vaccine are harmonized with the recommendations for MMR vaccine use and intended to limit the period when children have no varicella antibody. The recommended age for the second dose is supported by the current epidemiology of varicella, with low incidence and few outbreaks among preschool-aged children and higher incidence and more outbreaks among elementary-school-aged children. However, the second dose may be administered at an earlier age, provided that the interval between the first and second doses is 3 months. The recommendation for the minimum interval between doses is made on the basis of the design of the studies evaluating 2 doses among children aged 12 months-12 years. MMRV vaccine may be used to vaccinate children against measles, mumps, rubella, and varicella simultaneously. Because the risk for transmission can be high among students in schools, colleges, and other postsecondary educational institutions, students without evidence of immunity should receive 2 doses of varicella vaccine. All children and adolescents who received 1 dose of varicella vaccine previously should receive a second dose.

Varicella disease is more severe and its complications more frequent among adolescents and adults. The recommendation for vaccination of all adolescents and adults without evidence of immunity will provide protection in these age groups. Because varicella might be more severe in immunocompromised persons who might not be eligible for vaccination, and because of the risk of VZV transmission in health-care settings, HCP must be vaccinated. Varicella disease during the first two trimesters of pregnancy might infect the fetus and result in congenital varicella syndrome. Therefore, routine antenatal screening for evidence of immunity and postpartum vaccination for those without evidence of immunity now is recommended.

**Recommendations for the Use of Varicella Vaccines**

Two 0.5-mL doses of varicella vaccine administered subcutaneously are recommended for children aged >12 months, adolescents, and adults without evidence of immunity. For children aged 12 months-12 years, the recommended minimum interval between the two doses is 3 months. However, if the second dose was administered >28 days after the first dose, the second dose is considered valid and need not be repeated. For persons aged >13 years, the recommended minimum interval is 4 weeks. Single-antigen varicella vaccine is approved for use among healthy persons aged >12 months. Combination MMRV vaccine is approved for use among healthy children aged 12 months-12 years. MMRV vaccine is indicated for simultaneous vaccination against measles, mumps, rubella, and varicella. Whenever any components of the combination vaccine are indicated and the other components are not contraindicated, use of licensed combination vaccines, such as MMRV vaccine, is preferred over separate injection of equivalent component vaccines.

**Routine Vaccination for Persons Aged 12 Months – 12 Years**

**Preschool-Aged Children**

All healthy children should receive their first dose of varicella-containing vaccine routinely at age 12-15 months.

**School-Aged Children**

A second dose of varicella vaccine is recommended routinely for all children aged 4-6 years (i.e., before entering prekindergarten, kindergarten, or first grade). However, it may be administered at an earlier age provided that the interval between the first and second dose is >3 months.

Because of the risk for transmission of VZV in schools, all children entering school should have received 2 doses of varicella-containing vaccine or have other evidence of immunity to varicella.

**Persons Aged >13 Years**

Persons aged >13 years without evidence of varicella immunity should receive two 0.5-mL doses of single-antigen varicella vaccine administered subcutaneously, 4-8 weeks apart. If >8 weeks elapse after the first dose, the second dose may be administered without restarting the schedule. Only single-antigen varicella vaccine may be used for vaccination of persons in this age group. MMRV is not licensed for use among persons aged >13 years.

Resolution No. 0609-3 dated June 25, 2009
FDA Approves New Vaccine to Prevent Japanese Encephalitis

March 30, 2009: The U.S. Food and Drug Administration approved IXIARO, a vaccine to prevent Japanese encephalitis (JE) which is caused by a mosquito-transmitted virus found mainly in Asia. IXIARO will be the only vaccine for JE available in the United States.

“This vaccine offers protection for individuals who travel to or live in areas where outbreaks are known to occur,” said Karen Midthun, M.D., acting director of the FDA’s Center for Biologics Evaluation and Research.

In Asia, JE affects about 30,000 to 50,000 people each year, resulting in 10,000 to 15,000 deaths. JE is rarely seen in the United States, with very few cases reported among civilians and military traveling from the United States to Asia.

The virus that causes JE affects membranes around the brain and mild infections can occur without apparent symptoms other than fever and headache. In people who develop severe disease, JE usually starts as a flu-like illness but can worsen, causing high fever, neck stiffness, brain damage, coma, or even death. The disease is transmitted via infected mosquitoes; it is not spread from human to human.

IXIARO is a second-generation JE vaccine, in that it is manufactured using cell culture technology leading to improved manufacturing efficiency as well as more reliable control of the vaccine manufacturing process. This technology utilizes an established bank of cells that can be drawn from at any time contributing to the assurance of consistent vaccine quality. It also enhances the ability to rapidly manufacture a vaccine on a large scale if needed, without compromise to the vaccine’s safety or effectiveness.

Clinical studies were conducted in more than 800 healthy men and women in the United States and Europe. Participants received either IXIARO or JE-VAX, another U.S.-licensed vaccine that is no longer being manufactured. The studies found that IXIARO produced sufficient levels of antibodies in the blood to protect against JE. IXIARO requires two doses instead of JE-VAX’s three.

The vaccine was well tolerated and the most commonly reported adverse events were headache, muscle pain and pain, swelling, and tenderness at the injection site. Overall, it was more tolerable and had fewer side effects than the comparator, JE-VAX.

IXIARO is manufactured by Intercell Biomedical, Livingston, U.K.


Lighten up!

These are from a book called Disorder in the American Courts, and are things people actually said in court, word for word, taken down and now published by court reporters who had the torment of staying calm while these exchanges were actually taking place.

Disorder In American Courts

Attorney: Do you recall the time that you examined the body?
Witness: The autopsy started around 8:30 pm.
Attorney: And Mr. Denton was dead at the time?
Witness: No, he was sitting on the table wondering why I was doing an autopsy on him!

Attorney: Now doctor, isn’t it true that when a person dies in his sleep, he doesn’t know about it until the next morning?
Witness: Did you actually pass the bar exam?
Epidemiology and Outcomes From Out-of-Hospital Cardiac Arrest in Children

The Resuscitation Outcomes Consortium Epistry–Cardiac Arrest

Dianne L. Atkins, MD; Siobhan Everson-Stewart, MS; Gena K. Sears, BSN; Mohamud Daya, MD, MS; Martin H. Osmond, MD, CM, FRCPC; Craig R. Warden, MD, MPH; Robert A. Berg, MD; the Resuscitation Outcomes Consortium Investigators

From the University of Iowa Carver College of Medicine, University of Iowa Children's Hospital, Iowa City (D.L.A.); Department of Biostatistics, University of Washington, Seattle (S.E.-S., G.K.S.); Center for Policy and Research in Emergency Medicine (M.D.) and Departments of Emergency Medicine and Pediatrics (C.R.W.), Oregon Health and Science University, Portland; Department of Pediatrics, University of Ottawa, Ottawa, Ontario, Canada (M.H.O); and Children's Hospital of Philadelphia, University of Pennsylvania School of Medicine, Department of Anesthesiology and Critical Care Medicine, Philadelphia (R.A.B.).

Background—Population-based data for pediatric cardiac arrest are scant and largely from urban areas. The Resuscitation Outcomes Consortium (ROC) Epistry–Cardiac Arrest is a population-based emergency medical services registry of out-of-hospital nontraumatic cardiac arrest (OHCA). This study examined age-stratified incidence and outcomes of pediatric OHCA. We hypothesized that survival to hospital discharge is less frequent from pediatric OHCA than adult OHCA.

Methods and Results—This prospective population-based cohort study in 11 US and Canadian ROC sites included persons <20 years of age who received cardiopulmonary resuscitation or defibrillation by emergency medical service providers and/or received bystander automatic external defibrillator shock or who were pulseless but received no resuscitation by emergency medical services between December 2005 and March 2007. Patients were stratified a priori into 3 age groups: <1 year (infants; n=277), 1 to 11 years (children; n=154), and 12 to 19 years (adolescents; n=193). The incidence of pediatric OHCA was 8.04 per 100 000 person-years (72.71 in infants, 3.73 in children, and 6.37 in adolescents) versus 126.52 per 100 000 person-years for adults. Survival for all pediatric OHCA was 6.4% (3.3% for infants, 9.1% for children, and 8.9% for adolescents) versus 4.5% for adults (P=0.03). Unadjusted odds ratio for pediatric survival to discharge compared with adults was 0.71 (95% confidence interval, 0.37 to 1.39) for infants, 2.11 (95% confidence interval, 1.21 to 3.66) for children, and 2.04 (95% confidence interval, 1.24 to 3.38) for adolescents.

Conclusions—This study demonstrates that the incidence of OHCA in infants approaches that observed in adults but is lower among children and adolescents. Survival to discharge was more common among children and adolescents than infants or adults.
Positive Parenting Seminar 2009 Goes Nationwide

Educating and training parents to be well equipped can be done today, and it can be done confidently in the busy times in which we live. The Positive Parenting Seminar 2009 is designed to assist parents in areas of mother and newborn care and beyond that, nutrition for the child.

Mother & Newborn Care Seminar (May – June)
Supported by GlaxoSmithKline (GSK)

<table>
<thead>
<tr>
<th>Location</th>
<th>Kuala Lumpur, Petaling Jaya, Johor Bahru, Penang</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Speakers</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Paediatrics</strong></td>
<td>Datuk Dr Zulkifli Ismail</td>
</tr>
<tr>
<td></td>
<td>Dr Kok Chin Leong</td>
</tr>
<tr>
<td></td>
<td>Dato’ Dr Musa Nordin</td>
</tr>
<tr>
<td></td>
<td>Dr Koh Chong Tuan</td>
</tr>
<tr>
<td><strong>O&amp;G</strong></td>
<td>Assoc Prof Dr Tan Ay Eng</td>
</tr>
<tr>
<td></td>
<td>Dr Mahalakshmi Ratnavale</td>
</tr>
<tr>
<td><strong>Psychology &amp; Psychiatry</strong></td>
<td>Dr M Swamenathan</td>
</tr>
<tr>
<td></td>
<td>Dr Haslina Mohd Yusuf</td>
</tr>
<tr>
<td></td>
<td>Dr Zasmani Shafiee</td>
</tr>
</tbody>
</table>

The seminar topics gave parents insights on possible risks in pregnancy, the importance of vaccination, and learning to cope after pregnancy, together with additional sound advice on family dynamics. The “Vaccine-preventable Diseases” booklet by MPA was also launched during the first Mother & Newborn Care Seminar at Kuala Lumpur, accompanied by Mr Francis Del-Val, General Manager of GSK Malaysia, Singapore & Brunei.

Child Nutrition Seminar (May – July)
Supported by Abbott Nutrition International (ANI)

<table>
<thead>
<tr>
<th>Location</th>
<th>Petaling Jaya, Penang, Kuantan, Johor Bahru</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Speakers</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Dietitians</strong></td>
<td>Dr Shanaz Mawji</td>
</tr>
<tr>
<td></td>
<td>Dr Hera Lukman</td>
</tr>
<tr>
<td></td>
<td>Assoc Prof Dr Nik Mazlan</td>
</tr>
<tr>
<td><strong>Psychologists</strong></td>
<td>Ms Saralla Chettiar</td>
</tr>
<tr>
<td></td>
<td>Dr M Swamenathan</td>
</tr>
</tbody>
</table>

Parents were able to gain insights on the importance of early nutrition, health implications of nutrition, and parenting tips for handling feeding problems.

BERITA MPA – JULY 2009 14
**4th Federation of Islamic Medical Associations (FIMA) International Conference: Health Problems in Relation to Displacements and Disaster**

In collaboration with Sudanese Islamic Medical Association (SIMA)

**Date:** 15-16 August 2009  
**Venue:** Friendship Hall, Khartoum, Sudan  
**Secretariat:** Sudanese Islamic Medical Association (SIMA)  
Akshaha, Khartoum, Sudan  
PO Box 12810  
**Tel:** +249 155 122247  
**Fax:** +249 183 15512224  
**Mobile:** +249 912 660888  
**Email:** simaconference@gmail.com  
**Website:** http://simaconference.com

**International Symposium on Pediatric Inflammatory Bowel Disease (PIBD 2009)**

**Date:** 9-12 September 2009  
**Venue:** CNIT, La Défense / Paris - France  
**Congress:** PIBD 2009 c/o MCI France  
24 rue Chauchat - 75009 Paris - France  
**Tel:** 33 (0) 1 53 85 82 68  
**Fax:** 33 (0) 1 53 85 82 83  
**Email:** PIBD2009info@mci-group.com  
**Website:** http://www.pibd2009.com

**The 50th Annual Meeting of the European Society for Paediatric Research (ESPR)**

**Date:** 9-12 October 2009  
**Venue:** Hamburg, Germany  
**Secretariat:** Kenes International  
1-3 Rue de Chantepoulet  
CH-1211 Geneva 1 Switzerland  
**Tel:** +41 22 908 0488  
**Fax:** +41 22 732 2850  
**Email:** espr09@kenes.com  
**Website:** http://www2.kenes.com/Paediatric-Research/pages/home.aspx

**Haematology Conference 2009**

Haematology in the Next Decade  
National Institute of Blood Disease & Bone Marrow Transplantation under the patronage of Pakistan Society of Haematology  
**Date:** 16-18 October 2009  
**Venue:** Pearl Continental Hotel, Karachi, Pakistan  
**Secretariat:** Muhammad Akif Ali Atif  
**Tel:** +92 214821502 03  
**Mobile:** +92 345 2102897  
**Email:** events@nibd.edu.pk  

**4th International Conference on Thalassemia**

**Date:** 31 October – 1 November 2009  
**Venue:** New Delhi, India  
**Secretariat:** Shobha Tuli  
Thalassemics India  
A-9, Nizamuddlin West  
New Delhi – 110013, India  
**Tel:** 41827334  
**Fax:** 24353871  
**Email:** thalcsind@yahoo.com.in  
**Website:** http://thalassemicsindia.org

**19th Annual Meeting Of The Medical Research Society Of Pakistan**

**Date:** Saturday, October 31, 2009  
**Venue:** University of Health Sciences (UHS), Lahore  
**Conference:** Ms. Aniqa Agha  
**Secretariat:** Shaukat Khanum Memorial Cancer Hospital & Research Center  
7 - A, Block R-3, Johar town  
Lahore, Pakistan  
**Tel:** 92 42 594 5100 ext 2524  
**Fax:** 92 42 594 5205  
**Email:** aniqa@skm.org.pk

**8th ISPCAN Asia Pacific Regional Conference on Child Abuse & Neglect**

Incorporating the 12th Australasian Conference on Child Abuse & Neglect  
**Child Abuse & Neglect: Looking Through the Lens of Prevention**  
**Date:** 15-18 November, 2009  
**Venue:** Perth, Australia  
**Secretariat:** Expertevents  
PO Box 377, Moorooka QLD 4105 Australia  
**Tel:** +61 7 3848 2100  
**Fax:** +61 7 3848 2133  
**Email:** apccan2009@expertevents.com.au

**6th World Congress of the World Society for Pediatric Infectious Diseases**

Mundane to Molecular  
**Date:** 18-22 November, 2009  
**Venue:** Buenos Aires, Argentina  
**Secretariat:** Kenes International  
1-3 Rue de Chantepoulet  
PO Box 1726  
CH-1211 Geneva 1 Switzerland  
**Tel:** +41 22 908 0488  
**Fax:** +41 22 732 2850  
**Email:** wspid@kenes.com  
**Website:** http://www2.kenes.com/Paediatric-Research/pages/home.aspx

**NEW ORDINARY MEMBERS**

Assoc. Prof. Paul Douglas Fullerton  
Monash University Clinical School  
JKR 1235 Bukit Azah  
80100 Johor Bahru  
Johor

Dr. Ian Ping Wee Yen  
27, Jalan Khong Kam Tak  
31400 Ipoh  
Perak

Dr. Victor Chen Woei Shiong  
1-6-5, No 2, Jalan Solaris  
Solaris Mont Kiara  
50480 Kuala Lumpur

Dr Haslizawati Hashim  
118A, Kg. Sungai Bugis  
02700 Simpang Empat  
Perlak  
Jalan Desa Utama, Taman Desa  
58100 Kuala Lumpur

Dr. R. Krishnan  
4, Lorong 12/14C  
46200 Petaling Jaya  
Selangor

Dr Alicia Liew Hsiao Hui  
A19-03, Casa Desa Condominium  
Jalan Desa Utama, Taman Desa  
58100 Kuala Lumpur

**CHANGE OF ADDRESS**

Dr Haslizawati Hashim  
118A, Kg. Sungai Bugis  
02700 Simpang Empat  
Perlak  
Jalan Desa Utama, Taman Desa  
58100 Kuala Lumpur

Dr R. Krishnan  
4, Lorong 12/14C  
46200 Petaling Jaya  
Selangor

Dr Alicia Liew Hsiao Hui  
A19-03, Casa Desa Condominium  
Jalan Desa Utama, Taman Desa  
58100 Kuala Lumpur
Feel Better, Not Bitter.
Even baby likes it...

The bitter the better is the medicine - this belief seems to transcend all eastern and western cultures as reflected in many proverbs and poems that date back centuries. Does good medicine really need to taste bitter?

At Kotra Pharma, we believe the contrary, good medicine must taste good. “Feel better, not bitter” is the philosophy we uphold close to our heart when developing the Axcel Paediatric Care range of products.

Axcel Paediatric Care is specially formulated range of medicinal syrups dedicated for mothers who want to give 100% to their children. Our team of research scientists takes all effort to mask bitter medicine without compromising the efficacy. Each Axcel Paediatric Care product is equipped either with a measuring cup or a Dose-Master™ for accurate dosing, each time every time.

We understand your needs. We are parents too.

Further information is available on request.