

Cams 2010 Annual Scientific Meeting and Gala

The Scientific Meeting this year was held on 10/30/10 at the Merrill Lynch Conference Center in the Financial Center of lower New York, a new site for us. There were 141 attendees at the meeting, 15 exhibit booths and 10 posters. The theme of the meeting was **A Symposium of Infectious Diseases**. There were a total of 10 lectures. The Conference started with Dr. Winston Wong of Kaiser Permanente giving a lecture on "Healthcare Reform". The recipient of our Scientific Award, Dr. Victor Yu, Professor of Medicine at the University of Pittsburgh, lectured about "Legionnaires' Disease." Our key-note speaker, Dr. Chuen Yen Lau from the U.S. Military H.I.V. Research Program, gave us an "Updates on HIV." An "Update on Hepatitis" was presented by Dr. Jian Jun Li of Maimonides Medical Center. Dr. Yu Shia Lin, also of Maimonides, gave us a full picture on "Healthcare Related Infections" and Ms. Mimi Lim from New York Hospital Queens followed with "Hospital Infection Control." It is amazing to know that there are so many cases of infections in the hospital setting. Vaccination is an important tool to wall off some infections, and Dr. Christina Tan of New Jersey Department of Health gave us a clear picture on "Vaccination Update". Of the important and common infectious diseases, Dr. Chun K. Yip, Clinical Professor of Medicine at Columbia told us the latest on "Tuberculosis", and Dr. David Huang of UMDNJ gave a talk on "Diarrheal Disease". With the copious use of antibiotics, it is very timely that Dr. Tom Chiang, also from UMDNJ, informed us about "Antibiotic Resistance." Summaries of 8 of the lectures are printed in this issue of Newsletter.

We were able to collect the power point slides from the speakers and have them printed, together with Abstracts for poster presentations, in a Journal which was handed out to the registrants.

There were 10 poster exhibited, and 3 were presented by medical students. We followed our tradition by giving them 2 prizes. The first prize this year went to Ivy Tam of SUNY Upstate and the second prize to John Lough of Rush Medical College. Both happened to be our 2010 Summer Research Fellows.

We received 99 evaluations for the meeting (92 were filled out by physicians) and the lectures received high marks, in general. There were mixed appraisal about the new Conference site. Positive remarks included good exhibit spaces (good flow of participants), good lunch (buffet but good quality and it was easy to eat in the conference room). Good AV (the room had many pillars but multiple screens alleviated the short-comings). Complaints included the place was hard to find (we can fix this by better descriptions of public transits and parking facilities), slow entry because of security-everyone needs a pass and a picture taken (nothing we can do about this), poor arrangements of exhibit booths (we can fix this), poor visibility of the speaker from many areas because of the pillars (nothing we can do for this) and bad location of the posters (we can fix this). Not known by the attendants are the facts that the venue is less expensive than the CitiCorp setting (plus side) but has no satisfactory break-out rooms (minus side). We will weigh all the pros and cons to decide if we are coming back here again.

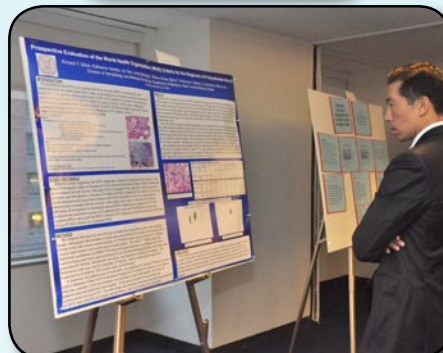


Opening remarks:
Drs. Warren Chin
(President) (left),
Paul C. Lee (Program
Chair) (right)



← Registration

▲ Busy corridor
Exhibits and Buffet Line ▼



Dr. Jerry Hou viewing a poster



The audience



The Gala was again held at Cipriani Wall street and we had a record turn-out of 490 people. We had a new, powerful MC, June Je. And the event was very lively, with lots of music, a magician's act, and of course, dancing. Dr. Victor Yu received the CAMS Scientific Award plaque and Ms. Virginia M. Kee, a founding member of the Chinese American Planning Council, received the CAMS Community Service Award. This year, we also bestowed a CAMS Community Physicians Service Award to three illustrious members, Drs. Newton Chin, Harvey Chu and Robert Nyein.

The Honorees



Dr. Yu receiving CAMS Scientific Award plaque from Dr. Paul Lee



Dr. Warren Chin with Ms. Virginia M. Kee, Community Service Award winner



Dr. Newton Chin with plaque, at his back from left are Drs. Benjamin Peng, Raymond Fong & Wilson Ko



Dr. Harvey Chu and family. In the back are his 3 physician sons, from left, Mark (G.I.), Felix (Cardiology) and Danny (G.I.)



Dr. Robert Nyein and family



Dr. Warren Chin (2nd from rt.) with Dr. Harris Nagler, President of Beth Israel Medical Center on his left and Controller of New York John Liu (center) and members from NYDH - from left, Cora Fung, Dr. Jeffrey Menkes (CEO), Miss Alison Fung and Mrs. Fung



Bob Schneck and Cora Fung



M.C. June Jee

Some old and some not-so-old members at the meeting- from left, Drs. Richard Chan, John Li, C.P. Chiu, Percy Tung, Jacqueline Chang, Kuo-Chen Wang, Chun K.Yip and John C. Wang





Group photo of CAMS & CAIPA Board members past and present, with 2010 honorees: from left, back row, Drs. Perry Pong, Johnny Lee, Ms. June Jee the MC, Drs. Victor Yu, Warren Chin, Robert Nyein, Newton Chin, Ms. Virginia Kee, Drs. Harvey Chu, George Liu and Blanche Leung; middle row, Drs. Felix Chu, William Cheung, Benjamin Peng, Thomas K. Chen, Wilson Ko, Jerry Huo, Danny Fong, Victor Chang and Raymond Fong; front row, Drs. Jonathan Chang, John C. Wang, Sun Hoo Foo, Ching Y. Lam, Alice Lau, Amy Chu-Wong, Lai Yet Lam, H. H. Wang, Ms. Jamie Seto, Drs. Paul C. Lee, Yick Moon Lee and Richard Chan.

CAMS Business Meeting

A meeting was held during lunch, with the following reports. We were told that the CAMS operating budget in 2010 totaled \$280,098.

Membership Committee (Dr. Blanche Leung): We now have 1272 active members (Life, 409; Regular, 338; Resident, 70; Associate, 38; Emeritus, 64; Honorary, 9 and Chapter, 244 – DC, 135, Boston, 78 and Albany, 31).

Finance Committee (Dr. Raymond Yung): At the end of September, 2010, we have \$315,379 in the General Fund (\$278,430 was invested); \$184,763 in the Educational Fund (\$182,772 was invested); and \$1,571,539 in the Community Service Fund (\$1,552,986 was invested)

Publication Committee (Dr. H. H. Wang): In 2010 we published 2 newsletters and a Directory. In the latter no personal information was included.

Scholarship Committee (Dr. Jerry Huo): 5 awards of scholarship were given- KaWing Cho of Columbia, Chad Tang of Stanford, YiRen Chen of Stanford, Janice Chen of UCSF and Raymond Choi of Stanford) and 2 Summer Research Fellowships were awarded (John Lough of Rush Med. College and Ivy Tam of SUNY Upstate)

Community Service Committee (Dr. Perry Pong): CAIPA, NYDH, CBW-CHC and Downstate medical students jointly had a successful flu vaccination program for 950 senior and high risk individuals in Manhattan, Flushing and Brooklyn Chinatown. A press conference was held on 9/22/10. Also jointly a news conference was held about influenza and hepatitis B on 5/12/10. CAMS has issued a Hepatitis B Position Statement which received many endorsements from local and national organizations.

CAMS/CAIPA Community Service Fund (Dr. George Liu): The mission of the fund is to support academic and research projects and for community services. In 2010 a total of \$100,335 was awarded.

China AIDS Fund (Dr. Wilson Ko, President): Dr. Ko reported the inauguration of a second children Center in Henan, China by the fund in 2010.

Research Committee (Dr. Victor Chang): The committee worked with FCMS to create a Researchers' directory to be hosted on the FCMS website.

Public Relations Committee (Dr. Raymond Yung): Monthly health columns have been published in 3 Chinese newspapers. For Heart health - We published in the World Journal about CAMS' position statement on American Heart Association (AHA)'s low sodium recommendation; conducted a clopi-

dogrel (Plavix) press conference on 3/25/10; and awarded the AHA 2009-10 MYC Community Impact Grant to educate patients in cardiovascular health and prevention; and with Chinese American Healthy Heart Coalition held a conference at the CUNY Graduate Center on 5/21/10 about the Cultural Context of Heart Health; CAMS team walked the AHA Wall Street Run and Heart Walk. We also co-sponsored the Better Body & Soul, a holistic health and beauty program.

Chapter Committee (Dr. Mina Sun, President of Albany Chapter, Dr. Chuen Yen Lau, Secretary of the Mid-Atlantic Chapter and Dr. Gifford Lum, Boston Chapter): The Albany Chapter has been very active. They held a Community Health Fair at the Chinese Community Center in April, organized a Sunday Chinese School, held a flu and blood pressure clinic on 11/6/2010, gave medical seminars at the Chinese school for the parents and provided mentorship for students at Albany Medical College. The Mid-Atlantic Chapter also has been very active. They organized a Pan-Asian volunteer Health Clinic, providing free care to needy Asians; advocate for CDC and NIH support for hepatitis B research, and gave annual scholarships of \$500-1,000 to regional students.

Program Committee (Dr. Paul C. Lee): The 2010 Annual Scientific Program on Infectious Diseases was presented on 10/30/10 at the Merrill Conference Center .

Social Committee (Dr. Blanche Leung): The main event in 2010 was the summer outing to Mohonk Mountain House, with 313 people attending. The event was supported in part by Health First.

Nominations Committee (reported by Dr. Danny Fong): The votes have been counted. Drs. Blanche Leung and Vick Moon Lee have been re-elected for another 3 year term. Congratulations to both! The by-laws amendments were approved.

By-laws Committee (Dr. H.H. Wang): The important points of the amendment which was just approved are the following: the position of Executive Vice-president is eliminated; Emeritus member is now called the Retired member, the number of Board members is limited to 15, with the addition of a Historian; the Chapter Committee is now a standing Committee, The Community Service Fund is now described; and the Advisory council is restructured.

CAMS NEWS

The 15th Health Conference of FCMS was held on 10/8-10/10 at the Millennium Biltmore Hotel in Los Angeles. It was hosted by the Chinese American Medical Association of Southern California with the theme “Changes and Challenges in Medicine”, a two and a half day affair with almost 500 participants. Many CAMS members attended the meeting and two of our members were speakers: Drs. Victor Chang and Elaine Kang-Yum.

The PCAMA (Philippine Chinese American Medical Association) had a pre-Thanksgiving party on 11/14/10 in Flushing. Dr. Darryl Wu invited many friends and Dr. Warren Chin won a raffle prize- a Santa!



Dr. & Mrs. Darryl Wu (seated center), flanked by Drs. Edwina Koo & H.H. Wang & Dr. Dennis Lee. Standing from left, Mrs. Chin, Drs. Warren Chin, John Wang, Jyming Wang, Amy Chu-Wong, and Mrs. Lee.



At the CAMS Board of Directors' meeting on 12/7/10, Dr. H. H. Wang was re-elected as Executive Director, and Susan Lau as Associate Executive Director.

A teleconference using Skype for the Board of Directors of FCMS was carried out on 11/17/10, Chaired by Dr. Ken Fung and arranged by Dr. Lisa Eng. Drs. Warren Chin, Sun Hoo Foo, Daisy Saw, Victor Chang and H.H.

Wang from CAMS participated. The meeting lasted for almost an hour. We have indeed modernized! What a satisfactory and economical way to have a teleconference!



Dr. Kun Yan, President and Dr. Dominic Foo, Treasurer of Greater Boston Chapter

The Greater Boston Chapter held a dinner meeting on 12/11/10, attended by about 30 members, including Dr. H. H. Wang from New York. The meeting was sponsored by Clinical View Points. Dr. Douglas T. Dieterich of Rush University gave a presentation on “Best practices for the management of hepatitis C-Screening Linkage to care and treatment.”

CAMS member honored: Home Crest Community Service will be honoring **Dr. Wilson Ko**, past President of CAMS, with a Professional Achievement Award, in March 2011. Congratulations!



Other CAMS Activities are described in the section of CAMS Business Meeting

In Memoriam

We mourn the passing of Dr. Chu-Huai Chang on 1/27/10, Professor Emeritus of Radiology of Columbia University and former Chief of Radiation Therapy in the Department of Radiation Oncology after an illustrious career of 50 years. Dr. Chang was also a Past-President of CAMS (1983). We all will miss him. Columbia honored him by establishing a Professorship in his name. Dr. K.S. Clifford Chow, also a member of CAMS, is the first Chu-huai Chang Professor.



HIV Update Chuen-Yen Lau, M.D.



HIV / AIDS frequently affects people in their prime of life. In this brief update, we will review the epidemiology of HIV, basic tenets of screening and management, and lastly highlight recent developments in HIV prevention research.

Prevalence in China is currently under 1%. Although surveillance for HIV has improved over the past several years, it is estimated that less than one third of infections have been diagnosed. Heterosexual contact

is now the primary mode of transmission and an increasing proportion of infections are being seen in women. Other factors contributing to the spread of HIV in China include: transmission amongst men who have sex with men (MSM), commercial sex work, inadequate condom use, increasing numbers of sexually transmitted infections (STI), earlier sexual debut and movement of “floating workers” between rural and urban areas.

Approximately 1.1 million people are currently infected in the United States. Infections have also shifted from occurring predominantly amongst MSM and IDU to include heterosexuals. Although Asian Americans have low infection rates, these rates are increasing.

Since HIV is such a devastating infection and because early detection provides benefit, the CDC recommends that all patients be screened for HIV. High-risk patients should be screened annually. Pregnant women should be screened at presentation and in the 3rd trimester. If recent exposure is a concern, serial testing is advised. Screening is typically done via ELISA and confirmatory testing by Western Blot. If results from the ELISA and Western Blot are indeterminate or if there is suspicion of false seropositivity, nucleic acid amplification should

be performed.

HIV infected people may present with acute retroviral syndrome within weeks after becoming infected. Acute retroviral syndrome requires a high index of suspicion for HIV as the constitutional symptoms can be easily mistaken for benign viral infection. The most common complaint is fever. Presentation can also include lymphadenopathy, pharyngitis, rash, myalgia, arthralgia, diarrhea and headache. During the acute retroviral syndrome, viral load is very high and infection can be more easily transmitted.

HIV vaccine development faces many serious challenges. For example, a protective immune response has never been seen in humans (in Hepatitis B, anti surface Ag antibodies indicate protection) so there is no strategy on which to model a vaccine. Also, studies in animals don't necessarily predict what will happen in humans. Several potential vaccines are in early phase clinical evaluation.

Microbicides are another prevention strategy being evaluated. Microbicides are gels that women insert intravaginally around the time of coitus. The CAPRISA 004 study recently demonstrated that Tenofovir gel used pre and post coitus had 39% efficacy (95% CI: 6-60) for prevention of HIV infection. The regimen also had a beneficial effect on HSV-2.

As demonstrated by the epidemiology and global social impact, HIV cannot be ignored. Physicians have a responsibility to facilitate prevention, diagnosis, appropriate management and reduced stigmatization of HIV/ AIDS. Use of currently accepted prevention strategies should be advocated. It is hoped that a future HIV vaccine or microbicide may help end the HIV epidemic.

Dr. Lau is Director, Clinical Operations Office, and Director, Rockville Vaccine Assessment Clinic, US Military HIV Research Program (MHRP), Rockville, MD

Chronic Hepatitis B Infection Overview

Jian Jun Li, M.D.



As of 2004, there were an estimated 350 million HBV infected individuals worldwide. National and regional prevalence ranges from over 10% in Asia to under 0.5% in the United States. Routes of infection include vertical transmission (such as through childbirth from infected mother), early life horizontal transmission (bites, lesions, and sanitary habits), and adult horizontal transmission (sexual contact, intravenous drug use, re-use of contaminated needles, sterility breakdowns).

During HBV infection, the host immune response causes both hepatocellular damage and viral clearance. The adaptive immune response, particularly virus-specific cytotoxic T lymphocytes (CTLs), contributes to most of the liver injury associated with HBV infection. CTLs eliminate HBV infection by killing infected cells and producing antiviral cytokines, which are then used to purge HBV from viable hepatocytes. This damage can lead to scarring of liver fibrosis, cirrhosis and increased risk of liver cancer.

After exposure to the hepatitis B virus, 90% adults will recover and develop protective antibody. 90% of infants and up to 50% of young children will develop a chronic infection. HBV is found in blood, seminal fluid, and vaginal secretions.

Clinical presentation: Many people with newly acquired hepatitis B have no symptoms at all, or they may be very mild and flu-like – loss of appetite, nausea, fatigue, muscle or joint aches, mild fever, and possibly jaundice. The only way to know if you are currently infected with HBV – or if you still carry the virus – is to ask your doctor to do a specific blood test for hepatitis B. The test may not become positive during the incubation period (45-180 days). There are three standard blood tests for HBV: HBsAG (hepatitis B surface antigen); Anti-HBc (antibody to hepatitis B core antigen); Anti-HBs (antibody to HbsAg) and HBV DNA.

Hepatitis B therapy: Although none of the available drugs can clear the infection, they can stop the virus from replicating, thus minimizing liver damage. Currently, there are seven medications licensed for treatment of hepatitis B infection in the United States. These include antiviral drugs lamivudine (Epivir), adefovir (Hepsera), tenofovir (Viread), telbivudine (Tyzeka) and entecavir (Baraclude) and the immune system modulators interferon alpha-2a and PEGylated interferon

alpha-2a (Pegasys). Peg Interferon; Baraclude- Entecavir and Viread – Tenofovir are the preferred medications.

Disease Outcome: Children are less likely than adults to clear the infection. More than 95% of people who become infected as adults or older children will stage a full recovery and develop protective immunity to the virus. However, this drops to 30% for younger children and to 5% for newborns who acquire the infection from their mother at birth. This last population has a 40% lifetime risk of death from cirrhosis or hepatocellular carcinoma. Because of this finding, it is considered standard of care for all pregnant women to be tested for HBV and if possible, for the newborn to be given immune globulin as well as the first of three shots of vaccine before leaving the hospital.

Prevention of HBV Infection: Practice safe sex (use latex condoms). Don't share anything that could have an infected person's blood on it, i.e. toothbrushes, razors, nail clippers, body piercing instruments. Don't share drug needles, cocaine straws or any drug paraphernalia. Cover all sores and rashes and do not touch them. Clean up any blood spills with a 10% solution of household bleach. Infected persons should not pre-chew food for babies. If exposed to hepatitis B, get an HBIG (hepatitis B immune globulin) injection within 14 days following exposure, followed by the HBV vaccine.

HBV vaccination: Several vaccines have been developed for the prevention of hepatitis B virus infection. Currently, it is made using synthetic recombinant DNA technology that does not contain blood products. One cannot be infected with hepatitis B from this vaccine. Vaccination provides protection for more than 15 years, and possibly a lifetime.

Liver cancer associated with hepatitis B: Chronic hepatitis B causes 50-80% of all primary liver Cancer. The 5 year survival rate from hepatocellular cancer is still below 10 %. Liver Cancer screen should be performed in all patients with cirrhosis, chronic hepatitis B with persistent elevated liver function tests, high HBV DNA level and age older than 40. The recommendation for liver cancer screening includes blood test for alpha fetoprotein(AFP) and ABD US every 6 months. Liver cancer management includes surgical treatment, chemo-radiation therapy, Intrahepatic arterial chemoembolization to chemoifusion (TACE or TAC) and liver transplant.

Dr. Li is Associate Professor of Medicine, Mt. Sinai School of Medicine, and Director, Division of Gastroenterology and Hepatology, Maimonides Medical Center, Brooklyn.

Vaccination Update

By Christina Tan, M.D., MPH



Among the ten leading causes of death among APIs, per 2006 data, are influenza and pneumonia, both vaccine-preventable diseases. Below are highlights related to three vaccine-preventable diseases: influenza, *Streptococcus pneumoniae*, and hepatitis B.

Influenza. This year, CDC's Advisory Committee on Immunization Practices (ACIP) recommends routine influenza vaccination for all persons aged 6 months and older, representing an expansion of previous

recommendations for annual vaccination of all adults aged 19 to 49 years. All children aged 6 months to 8 years who receive a seasonal influenza vaccine for the first time should receive 2 doses. In addition, for the 2010-11 influenza season, children aged 6 months to 8 years who did not receive at least one dose of an influenza A (H1N1) 2009 monovalent vaccine should receive two doses of a 2010-11 seasonal influenza vaccine, regardless of previous influenza vaccination history. Health care providers should offer vaccine throughout the influenza season, beginning as early as October.

Streptococcus pneumoniae. *S. pneumoniae* is the second most common cause of vaccine-preventable death in United States, after influenza. Major clinical syndromes include pneumonia, bacteremia, and meningitis.

The 23-valent polysaccharide vaccine, PPV23, is the vaccine recommended routinely for adults 65 years and older and for persons 2 years and older and at high risk for disease, including those with decreased immune function; asplenia (functional or anatomic); chronic heart, pulmonary, liver or renal disease; history

of cigarette smoking; and cerebrospinal fluid leak.

The 13-valent polysaccharide conjugate vaccine, PCV13, was licensed in early 2010 and will replace PCV7. PCV13 includes six additional serotypes, in particular serotype 19A which has become the most common pneumococcal serotype and is often resistant to antibiotics.

Hepatitis B. CDC recommends a comprehensive strategy to eliminate hepatitis B virus transmission, including prenatal testing of pregnant women for hepatitis B surface antigen to identify newborns who require immunoprophylaxis for prevention of perinatal infection and to identify household contacts who should be vaccinated, routine vaccination of infants, vaccination of adolescents, and vaccination of adults at high risk for infection.

Hepatitis B vaccination is recommended for all infants soon after birth and before hospital discharge; primary vaccination consists of three intramuscular vaccine doses, and the usual schedule is 0, 1-2, and 6-18 months. Routine hepatitis B vaccination is recommended for all children and adolescents through age 18 years; all children not previously vaccinated at 11-12 years of age should be vaccinated with the age-appropriate dose of vaccine. Finally, routine pre-exposure vaccination should be considered for groups of adults who are at increased risk of hepatitis B virus infection.

Dr. Tan is State Epidemiologist/Assistant Commissioner, Division of Epidemiology, Environmental and Occupational Health (DEEOH), Public Health Service Branch, New Jersey Department of Health and Senior Services (NJDHSS)

2010 Update On Tuberculosis

Chun K. Yip, M.D.



Tuberculosis (TB) remains a major global health problem ravaging the world for thousands of years. More than 2 billion people are infected with the bacterium *M. TB*. One in 10 will develop active disease. In 2008 alone, there were 9.4 million new cases, and 1.8 million died from TB. There are at least 500,000 cases of multidrug-resistant TB (MDR-TB), about 7 per cent of whom are extensively drug-resistant TB (XDR-TB). Mortality in these drug-resistant cases is high, with cure rate from XDR-TB of only 60-65

per cent at best.

But it does not have to be this way because TB is treatable and preventable. Led by World Health Organization, global efforts to control TB were reinvigorated in recent years. The Stop TB Partnership was formed. So far, progress has been made in stopping and reversing the rising trends in incidence in most regions of the world, except in Africa and other impoverished areas.

Domestically in the United States, after decades of decline, there was dramatic increase in the late 1980's which peaked in 1992. Since then there has been substantial steady decrease. In New York City, the number of new cases declined to a record low in 2008, but is still more than double the national average. A closer look reveals that a majority of the new cases occur in persons born outside of the U.S., and particularly in New York City, it represents 76 per cent of the new cases in 2008. About half of these individuals have lived in the U.S. for 5 or less years. Ethnic minorities are affected the most, both in the U.S. and in New York City. While the number and case rates in other ethnic groups have been dropping steadily, those among Asian Americans remain almost constant. Asian Americans now have the most cases and the highest case rate of active TB in New York City. Most of these cases are due to reactivation of latent TB infection. Therefore, one of the strategies to further reduce the incidence of TB is to treat those with latent TB infection who are at increased risk to develop active disease.

Screening latent TB infection is appropriate only for those who would benefit from treatment. A decision to test implies a decision to treat, if the test is positive. People associated with increased risk of developing active TB include those with

systemic immuno-suppression, and cases of recent infection. Among these are the recent immigrants from endemic areas, and those with chest x-ray findings of fibronodular changes typical of old healed TB. We should target this group of patients in our community for latent TB infection screening and treatment.

Interferon-gamma release assay (IGRA) is a better alternative to the Mantoux PPD (skin) test and represents a major advance in the diagnosis of TB. It is an in vitro blood test of cell-mediated immune response. It measures the T-cell release of interferon-gamma following stimulation by antigens that are unique to *Mycobacterium tuberculosis*. It has excellent specificity of over 95 per cent that is not affected by BCG vaccination, and most other non-tuberculous mycobacteria. It essentially can replace PPD in nearly every situation, and is most useful for the evaluation of latent TB infection in BCG-vaccinated individuals. Currently, there are 2 commercially available IGRAs, QuantiFERON-TB Gold and T-Spot.TB assay.

With the advent of nucleic acid amplification testing, *M. tuberculosis* can be identified in the laboratory literally in hours. These molecular tests permit amplification of specific rRNA or DNA sequence of *M. tuberculosis* that can be detected by a nucleic acid probe. They are highly specific and quite sensitive, and may one day render AFB culture obsolete.

Treatment regimens for active TB are still the same: 2 months of 4 drugs (isoniazid, rifampin, ethambutol, pyrazinamide), followed by 4 months of isoniazid and rifampin, for pan-sensitive organism. Compliance in completing the full treatment course is the major obstacle in treating TB. Directly observed therapy (DOT) was developed and has been proven to be effective and the best way in dealing with this important issue in treating TB. Every TB patient must be on a DOT program.

In summary, the 2010 global picture of TB is quite promising. Controlling and eradicating this ancient disease in the near future is definitely possible, and is no longer just a dream!

Dr. Yip is Clinical Professor of Medicine, Division of Pulmonary, Allergy & Critical Care, Columbia University, and Attending Physician, New York Presbyterian Hospital.

Healthcare-Associated Infections (HAIs)

Yu-Shia Lin, M.D.



Healthcare-associated infections (HAIs) occur in all settings of care. In the United States, HAIs account for an estimated 1.7 million infections and 99,000 deaths each year. The urinary tract is the most common site of infection, accounting for 32% of HAIs, followed by surgical site infections (22%), ventilator-associated pneumonia (15%) and central line-associated blood stream infections (14%). HAIs also impose significant economic consequences on the

nation's health care system, accounting for \$28 to \$33 billion in excess health care costs each year.

Antimicrobial-resistant pathogens that cause the HAIs pose an ongoing and increasing challenge to clinicians. Methicillin-resistant *Staphylococcus aureus* (MRSA) was first reported in 1960, and is associated with serious infections that occurred in healthcare facilities. Over the last decade, a distinct strain of MRSA has emerged that affects healthy members of the community. This community-associated MRSA (CA-MRSA) most commonly causes skin and soft tissue infections which can be mistaken for spider bites. CA-MRSA also has been associated with severe infections including necrotizing fasciitis and necrotizing pneumonia.

Multidrug-resistant gram negative bacilli are increasingly being reported worldwide. Extended spectrum beta lactamases (ESBLs) are enzymes that are capable of hydrolyzing extended spectrum cephalosporins and aztreonam. ESBLs are often found in the Enterobacteriaceae family of Gram negative bacilli, and their

prevalence varies significantly depending on geographic region. Carbapenems (broad spectrum beta-lactam antibiotics) are currently the treatment of choice for ESBL producing organism. However, the emergence of carbapenemase; is a serious concern. The first carbapenemase was isolated from *Klebsiella pneumoniae* in the late 1990s and is called *Klebsiella pneumoniae* carbapenemase (KPC). These infections are associated with high mortality rates. Many clinicians have resorted to the use of combination therapy, including polymyxins, tigecycline, meropenem and /or rifampin, for treatment of infections caused by KPC producing bacteria.

Widespread use of the broad spectrum antibiotics is responsible for the increasing incidence of *Clostridium difficile* infections (CDI) in healthcare settings. CDI affect approximately 500,000 people and cause 5000 deaths each year in the United States. The severity of CDI is also increasing due to the appearance of a new hypervirulent strain (B1/NAP1 strain). This new strain is highly resistant to fluoroquinolones and produces large amounts of toxin in vitro, which presumably correlates with greater toxin production in vivo.

In summary, resistant bacteria and CDI are increasingly prevalent causes of HAIs. Early recognition and optimization of treatment, implementation of antibiotic stewardship and effective infection control procedures are very important in controlling the spread of these organisms and improving patient outcomes.

Dr. Lin is Attending Physician in Infectious Diseases, Maimonides Medical Center, Brooklyn.

Hospital Infection Control

Mimi Lim, RN, MPA, CIC, NEA-BC



Medical devices are often the cause of infections for the consumers. The most noted are the Central Line Associated Bloodstream Infections (CLABSI). 48% of the ICU patients have a central line. With a mortality rate of 4% to 20% and an estimated cost to be \$3,700 to \$29,000 per infection, it is of great concern. In 2005, the Greater New York Hospital Association and the United Hospital Fund collaborated with 36 hospitals to reduce/eliminate CLABIs in the ICUs.

The collaborative study revealed that by implementing the central line bundle (hand hygiene, precaution upon insertion, chlorhexidine skin antiseptic and daily review of line necessity) and standardizing line maintenance procedures, a reduction (and even elimination) of CLABIs in the ICUs is possible.

Catheter Associated Urinary Tract Infection (CAUTI) and Ventilator Associated Pneumonia (VAP) may also be reduced or eliminated by following their specific bundles. (hand hygiene, insert using aseptic technique, elevate head of bed to

between 30 and 45 degrees when using the ventilator, and review the catheter or ventilator necessity daily)

There are about 500,000 surgical site infections (SSIs) nationwide annually. SSIs can be prevented by the use of carefully selected antimicrobial prophylaxis with the addition of evidence based best practices and bundled approaches. (hand hygiene, antibiotic given within one hr. of surgical incision, glucose less than 200dl at 6am on POD #1 or #2 for cardiac surgery patients, appropriate hair removal – clippers only, urinary catheter removal on POD #1 or 2, and perioperative temperature management-Pts with active intraoperatively warming or a temperature $\geq 96.8^{\circ}$)

Handwashing is the best weapon in the prevention of many HAIs. As leaders in the field of preventing infections to protect our patients, we must insist that those around us wash their hands prior to touching patients.

Miss Lim is Clinical Director of Patient Care Service, New York Hospital Queens

Antibiotic Resistance

Tom Chiang, M.D.



In this presentation, clinically important resistant bacteria are summarized with special emphasis on local resistance issues found in the Northeast United States. ESKAPE (Enterococci, Staphylococcus aureus, Klebsiella, Acinetobacter, pseudomonas and Enterobacter), are the most pertinent resistant bacteria found clinically today.

The first two organisms are Gram positives. Enterococci, while not as virulent as Staphylococcus aureus or the gram negatives, can be incredibly resistant and difficult to treat. Recommended treatment is always dual effective therapy. The second Gram positive organism is no stranger to any clinician: Methicillin resistant Staphylococcus aureus (MRSA). Treatment for the two resistant Gram positives include vancomycin, daptomycin, linezolid, tigecycline, and quinupristin/dalfopristin depending on site of infection and resistance patterns of the individual organisms.

Now the Gram negatives. Carbapenem resistant Klebsiella pneumoniae (CRKP) containing the KPC (Klebsiella pneumoniae carbapenemase) gene is endemic to

the Northeast United States and presents a huge challenge as not only are these organisms resistant to carbapenems, they are almost always multi drug resistant. Clinically, to treat these CRKP organisms, a combination of polymixin with high dose extended infused carbapenems or tigecycline can be used. Once the CRKP becomes resistant to polymixin the bactericidal effect of the drug drops three fold. Therefore, polymixins must be used properly as it is the last line of defense of resistant Gram negatives.

The last three Gram negative organisms will be discussed together. Traditionally known as the Amp-C (chromosomal ampicillinase) organisms, they too have now become resistant to carbapenems. The recommended treatment for these two non lactose fermenters would be combination therapy of polymixin with high dose extended infused carbapenems. Lastly, Enterobacter's resistance to carbapenems was acquired from Klebsiella's KPC gene via bacterial plasmid transformation. Treatment would be the same as for CRKP above.

Dr. Chiang is Assistant Professor of Medicine at New Jersey Medical School and infectious disease attending at Veteran's Affairs New Jersey Health Care System

An Overview of Diarrheal Diseases

David Huang, M.D.



This presentation focuses on infectious diarrheas which are transmitted by person to person or ingestion of contaminated food and/or water. Infectious diarrheal diseases may be categorized into epidemiological categories which include: 1) community acquired or travelers' diarrhea; 2) hospital acquired; 3) persistent diarrhea; and 4) Other.

In general, patients with diarrhea should be worked up: 1) Those with severe and/or unresolved diarrhea.

2) Infants and young children with moderate or severe diarrhea, 3) Patients with nosocomial or health care associated diarrhea because complications (e.g., pseudomembranous colitis, toxic dilation of the colon from *C. difficile* infection) or outbreaks may potentially develop, and 4) Patients with persistent diarrhea (>7-14d) because postinfectious diarrhea complications (e.g. postinfectious irritable bowel disease) and malnutrition may develop.

If a community acquired (e.g., infant, childhood, and adults settings [family, day care, nursing home]) or travelers' diarrhea (e.g., travel to a high-risk region [i.e., Mexico]) is suspected, stool culture and appropriate tests should be sent for *Campylobacter*, nontyphoidal *Salmonella*, *Shigella*, *E. coli* O157:H7 (if bloody diarrhea and a history of recent ingestion of beef), and *C. difficile* (an increasing cause of community acquired diarrhea given the outpatient prescribing of antibiotics). Empiric fluoroquinolone therapy for adults and trimethoprim-sulfamethoxazole (TMP-SMX) for children should be initiated for suspected diarrheal infections caused by diarrheagenic *E. coli* (enterotoxigenic and enteroaggregative *E. coli* are

the two most common bacterial causes of travelers' diarrhea), nontyphoidal *Salmonella*, and *Shigella*. If *Campylobacter* is suspected, erythromycin or azithromycin should be initiated because of increasing concerns of fluorquinolone resistant *Campylobacter* spp. Antimotility, quinolone and TMP-SMX should be avoided among patients with suspected enterohemorrhagic *E. coli* (EHEC; O157:H7). It is important to note that in the US, rotaviruses and noroviruses are the leading causes of diarrheal illness for which there is no available treatment. If a persistent diarrhea (>7-14d) is suspected, light microscopy to view ova and parasite and enzyme-linked immunoabsorbent assays (ELISA) methods are available for parasites such as *Giardia*, *Cryptosporidium*, *Cyclospora*, and *Isospora*. Among immunocompromised patients (e.g., AIDS, IgA deficiency), *Microsporidia* and *Mycobacterium avium* complex should also be tested among fecal samples from these patients. Empiric metronidazole or tinidazole should be initiated among patients with known or suspected *Giardia* infection. Enteric adenoviruses and cytomegaloviruses can also cause severe enterocolitis in immunocompromised hosts. Among other patients with diarrheal illness, the epidemiologic history including exposure (e.g., lakes, foods and travel) will guide further diagnostic workup. For example, patients who have been exposed to lakes and rivers should be tested for *Cryptosporidium* and *Giardia*; ingested Guatemalan raspberries should be tested for *Cyclospora*; recent travel to Mexico and Asia or homosexual males should be considered for *E. histolytica*; recent travel on cruise ships should be considered for norovirus.

Dr. Huang is Assistant Professor, UMDNJ, and Global Medical Director, Pfizer Pharmaceuticals, Inc.

New Members

The following new members have been approved by the Board of Directors at their meetings on December 7, 2010.

Life Members: Yeh Ping Chou, D.O., Thomas Lyo, M.D., Yiding Li, M.D. **Honorary Member:** Victor L. Yu, M.D. **Regular members:** Jerry Chang, M.D., Andrew Chung, D.M.D., Wen Dombrowski, M.D., Lourdes Marie Flaminiano, M.D., Po Ching Fong, M.D., Elaine Kung, M.D., Hong Li, M.D., Si-Yuen Moy, M.D., Norland Ng, M.D., Punyadech Photangtham, M.D., Vi Quach, M.D., Antoine Rabinowitz, M.D., Marita Teng, M.D., Myo Thant, M.D., Hui Hing Tin, M.D., Lim H.

Tse, M.D., Caroline Y. Wang, M.D., Daniel Wang, M.D., Yan Wolfson, M.D., Jingbo Zhao, M.D. **Associate Members:** Maria Lau Poon, R.N., Sue Ling Lee, B.S.N., M.P.A. **Student Members:** David Chiang, Yunnan Jiang, Ivy Tam, Rachel Zhang. **Student Members (Albany):** William Chang, Eric Chen, Yibo Chen, Heidi Ching, Xi Huang, Hank Lai, David Tsai, Cynthia Tun Twu, Jimmy Yao.

Job Opportunities

We have had a large listing and will not include these here. Please view these openings at our website:

camsociety.org

The editor wishes to thank Dr. John Li for editing and proof reading, Jerry Diamond for graphic design and typesetting. Robert Schneck and Susan Lau for Photography.

In this Issue

CAMS 2010 Scientific Meeting	1
2010 Gala	2
CAMS Business Meeting	3
CAMS News	4
In Memoriam	4
Scientific Meeting Summaries	4
New Members	8
Job Opportunities	8

CAMS Board of Directors, 2010

Warren Chin, M.D., President
 Raymond Yung, M.D., Vice-President
 Johnny Lee, M.D., Secretary
 Danny Fong, M.D., Treasurer
 Hsueh hwa Wang, M.D., Executive Director
 Susan Lau, Associate Executive Director
 Richard Chan, M.D.
 Victor Chang, M.D.
 Clifford K.S. Chao, M.D.
 Wellman Cheung, M.D.
 Jerry Huo, M.D.
 Paul C. Lee, M.D.
 Yick Moon Lee, M.D.

Mary Lee-Wong, M.D.
 Blanche Leung, M.D.
 Perry Pong, M.D.
 Sidney Wu, M.D.
 David Chiu, M.D. (Ex-officio)
 Benjamin Peng, M.D. (Ex-officio)
 Wilson Ko, M.D. (Past President, ex-officio)
 Mina Sun, M.D. (Capital District Chapter)
 Kun Yun, M.D. (Greater Boston Chapter)
 Mark Li, M.D. (Mid-Atlantic Chapter)
 Allison Kwong, Student Representative
 Benjamin Lok, Student Representative
 Qing Wang, Student Representative

Non-Profit Org.
 U.S. Postage
 PAID
 Plattsburgh, NY
 Permit No. 148

Return Service Requested
 Teaneck, NJ 07666
 281 Edgewood Ave.
 Hsueh hwa Wang, M.D., Editor