



Friends of Detectives

Science Education Partnership Award

Summer 2004

Detectives in Hong Kong

中學教師專業發展研討會

「課室裏的偵探 — 有關科學科、數學科及健康教育科之
流行病學教材」

**Professional Development Seminar for Secondary School Teachers
“Detectives in the Classroom – A Epidemiology Curriculum for Science,
Mathematics, and Health Educators”**

What began with a column in the March 2001 edition of *EpiMonitor* resulted in a *Detectives in the Classroom* Professional Development Workshop held in Hong Kong on June 5, 2004.

Shortly after the column, “Colleagues Team Up to Develop Epidemiology-Related Course for Middle School Students,” was published, an e-mail arrived from Dr. Suzanne Ho, from Chinese University of Hong Kong. Dr. Ho, an epidemiologist in the Department of Community and Family Medicine, School of Public Health, leads several randomized trials exploring the role of nutritional supplements in preventing osteoporosis. In her note, she expressed interest in learning more about our middle school curriculum.

To make a long (3 years) story short, after numerous e-mails, telephone calls, and a video conference, plans were finalized to hold the workshop, in Hong Kong, on the morning of June 5th. Dr. Ho hoped that 20 teachers would participate. We were all pleasantly surprised when more than 50 teachers attended the Saturday morning workshop. Perhaps the role of epidemiology in identifying and controlling the SARS and avian influenza epidemics was responsible.

After the teachers were oriented to the curriculum’s five enduring understandings and essential questions, they participated in six of the *Detectives*’ 34 investigations; Why Are These Students Getting Sick?, What’s My Hypothesis?, The 2x2 Table, Compared to What?, The Journey, and Confounding. The highlight of the workshop was the discussion of how well *Detectives* would “travel” to Hong Kong. Interestingly, just like teachers in the US, several Hong Kong teachers expressed the challenge of fitting epidemiology into their already packed curriculum. Others suggested incorporating the science into their curricula by assigning students epidemiology-based projects.



Morning Workshop: (From left to right: Dr. Din-yan Yip, University of Hong Kong, Department of Curriculum and Instruction, Mark, Wendy, and Dr. Suzanne Ho, Chinese University of Hong Kong, Department of Community and Family Medicine, School of Public Health



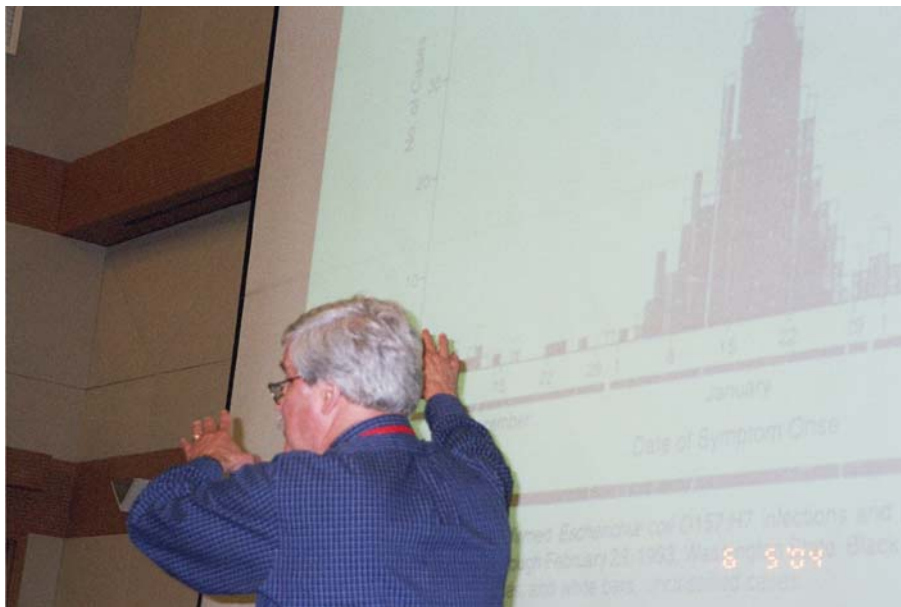
Welcoming Participants: Roselle Lee, Chinese University of Hong Kong, Department of Community and Family Medicine, School of Public Health

What a Disease Detective Does

On the afternoon of the June 5th, we were invited to participate in a second event, a seminar for Hong Kong high school students, entitled “The Role of Health Professionals in Disease Control and Prevention.” More than 270 students and teachers attended presentations on the Avian Flu, Hand Washing, SARS, Isolation and Quarantine, and Vaccine Development. We were asked to talk about “Investigating an Infection from Eating Hamburger – What a Disease Detective Does” and had decided to have students experience the epidemic curve of an actual 1992-1993 E. coli outbreak.



Simulated Curve: By holding up DZ (disease) signs with the date of onset for each case, students prepare to simulate the epidemic curve of an actual outbreak of more than 450 cases of E. coli. Students were then asked to estimate the date when they thought cases were reported to authorities for the first time. Sixteen red DZ signs were included to designate 16 cases in a case-control study that identified “chain A” restaurants as the source of the outbreak.



Actual Curve: After experiencing the E. coli O157:H7 outbreak over time, students view the actual epidemic curve, taken from the journal article, depicting the outbreak.

Next Professional Development Workshop

The next all-day *Detectives in the Classroom* Professional Development Workshop will be held on Friday, October 15, 2004, at Montclair State University.

Planning a Professional Development Workshop

If you are interested in scheduling a *Detectives in the Classroom* Professional Development Workshop in your school district, please visit the *Detectives in the Classroom* web site at: www.montclair.edu/detectives. (Click on *Partnerships*, click on *Professional Development Workshops* in the left-hand menu, and click on *Workshop Preparation Checklist*.)

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For technical questions about the *Detectives in the Classroom* web site
contact John Huebner at john@blackcoffeetravel.com

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