

Novel human coronavirus associated with respiratory disease

Jeffrey S Kahn and colleagues at Yale University School of Medicine have identified a novel human coronavirus in children in New Haven, CT, USA, that may be the cause of previously unattributed respiratory tract infections (*J Infect Dis* 2005; **191**: 492–98). The same virus has been detected in children with Kawasaki disease. "Further studies are required to determine the precise role played by New Haven coronavirus in the pathogenesis of Kawasaki disease, and to investigate whether the virus is linked with other clinical syndromes", comments Kahn.

Kahn's group developed a PCR-based method to screen specimens from the respiratory tracts of 895 children. The PCR probes targeted regions of the replicate 1a gene that are conserved among genetically diverse animal and human coronaviruses. Specific probes subsequently developed for the variant New Haven coro-

navirus detected the presence of the virus in samples from 8.8% of the children tested. Last year, another novel coronavirus was identified by two groups in the Netherlands (*Proc Natl Acad Sci USA* 2004; **101**: 6212–16; *Nat Med* 2004; **10**: 368–73) and the two viruses were compared. "Sequence analysis revealed that New Haven coronavirus is closely related to the Netherlands virus and they are likely to represent the same species", reports Kahn.

In a second study, the same group tested respiratory secretions from 11 children with Kawasaki disease, after finding the virus in respiratory secretions from a 6-month-old infant with a definite diagnosis of the disease. Eight of the 11 children tested positive, compared with only one child out of 22 controls. "Statistically, these data suggest that New Haven coronavirus infection is associated with Kawasaki disease",

comments Kahn. Because Kawasaki disease—a systemic vasculitis of childhood—previously had an unknown aetiology, this finding has great clinical importance, he adds.

Kenneth McIntosh (Harvard Medical School, Boston, MA, USA) comments in an accompanying editorial that this latest study pushes coronaviruses even more firmly into the limelight after one was identified as the severe acute respiratory syndrome (SARS) agent in 2003. He advises caution in accepting the New Haven coronavirus as the aetiological agent of Kawasaki disease on the basis of the evidence presented so far, but he comments that there are several "tantalising facts about both coronaviruses and Kawasaki disease that might allow for cautious optimism with regard to the author's reported association".

Kath Senior

See *Lancet Infect Dis* 2004; **4**: 255

Vaccine initiatives get cash boost

The Bill and Melinda Gates Foundation (Seattle, WA, USA) has announced a grant of \$750 million to the Global Alliance for Vaccines and Immunisation (GAVI), spread over a 10-year period. This money will be used to address the major funding gap for child immunisation programmes in 72 developing countries.

Julian Lob-Levyt, executive secretary of GAVI, and incoming chief executive officer of The Vaccine Fund (the fundraising arm of GAVI), told *TLID*: "One of the great things about the Gates' money is that it is spread over a much longer period of time. For developing countries this is really important because they see long term, secure financing. They can plan their budgets and be assured that we are in there for the long term, and that we're not some sort of cut-and-run operation."

In announcing the donation, Bill Gates challenged governments and

other organisations to also pledge funding. "[These] commitments are only a down payment. Rich countries can and should increase immunisation

\$1.3 billion dollars, and received \$1.91 billion more in pledges.

The WHO estimates that an additional \$8–12 billion is required between 2005 and 2015 to strengthen immunisation systems and expand access to vaccines. The Vaccine Fund is a substantial contribution to this target, but funding also comes from UNICEF, the WHO, and national governments, among other sources. The International Financing Facility for Immunisation (IFFIm), proposed by the UK Chancellor, Gordon Brown, earlier this year would also make a large contribution to this goal, and has gained support from the French and Swedish governments, who have announced their participation, as well as from Italy. The UK has pledged \$1.8 billion over 15 years to the IFFIm, which would allow \$1.4 billion to be disbursed over a 10-year period.

Rob Brierley

See *Lancet Infect Dis* 2005; **5**: 7 and 10

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Money gives vaccine programmes shot in arm

funding to give children in developing countries a better shot at a healthy life", he said. Lob-Levyt says the challenge is being taken up: "The pledge from the Gates Foundation has helped bring other donors on board, and we now have pledges from ten countries, the EU, and private donors". To date, The Vaccine Fund has raised almost