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## IN BRIEF

### INFECTION

#### New marker could benefit schistosomiasis management

SjSP-13, a secreted *Schistosoma japonicum* protein, has been identified as a marker of schistosome infection. Recombinant SjSP-13 (rSjSP-13) had 90.4% sensitivity and 98.9% specificity when tested against infected serum samples. Diagnostic validity was confirmed in an area of China endemic for schistosomiasis: PCR analysis found that 92.4% of egg-negative individuals who were rSjSP-13 positive were infected. The authors believe that using the sensitive, specific and affordable rSjSP-13-based ELISA will help target treatment and aid control and elimination of schistosomiasis.

**Original article** Xu, X. *et al.* Serodiagnosis of *Schistosoma japonicum* infection: genome-wide identification of a protein marker, and assessment of its diagnostic validity in a field study in China. *Lancet Infect. Dis.* doi:10.1016/S1473-3099(14)70067-2

### COLONOSCOPY

#### L-menthol pauses peristalsis and aids adenoma detection

Colonic peristalsis during colonoscopy can conceal neoplastic lesions, and antispasmodic agents can cause adverse reactions. Inoue *et al.* report the benefits of applying the antiperistaltic compound L-menthol to the colonic mucosa prior to colonoscopy. Patients were treated with 1.6% L-menthol or placebo—neither had any adverse effects. The proportion of patients with no peristalsis after treatment and the adenoma detection rate were both significantly higher in the L-menthol group than the placebo group.

**Original article** Inoue, K. *et al.* L-menthol improves adenoma detection rate during colonoscopy: a randomized trial. *Endoscopy* doi:10.1055/s-0034-1365035

### GASTRIC CANCER

#### *Helicobacter pylori* infection improves response to cisplatin

New data might explain the observation that gastric cancer patients infected with *Helicobacter pylori* have an improved response to chemotherapy and better overall prognosis than those who aren't infected. Zhou *et al.* found *H. pylori* infection downregulates expression of miR-141 and that KEAP1 is a direct target of miR-141. In gastric cancer cells, cisplatin sensitivity was enhanced by miR-141 knockdown and by KEAP1 overexpression; cisplatin resistance was enhanced by miR-14 overexpression and by KEAP1 downregulation. In *H. pylori*-positive tissue samples KEAP1 was upregulated.

**Original article** Zhou, X. *et al.* *Helicobacter pylori* modulates cisplatin sensitivity in gastric cancer by down-regulating miR-141 expression. *Helicobacter* doi:10.1111/hel.12120

### GUT MICROBIOTA

#### Bacteria engineered to monitor our gut

Genetically engineered *Escherichia coli* can sense and report on conditions in the mouse gut, highlighting the potential for development of 'living diagnostics'. Mice were administered bacteria containing a memory system—a 'trigger element' (the lambda Cro gene transcribed from a tetracycline-inducible promoter) and a 'memory element' (from the phage lambda cI/Cro region). Faeces from anhydrotetracycline-treated mice contained only bacteria in the Cro state; faeces from untreated mice contained bacteria in the cI state.

**Original article** Kotula, J. *et al.* Programmable bacteria detect and record an environmental signal in the mammalian gut. *Proc. Natl Acad. Sci. USA* doi:10.1073/pnas.1321321111