In this special theme issue, Michael L Perdue & Tim Nguyen (246) look at the WHO public health research agenda for influenza two years from its initial publication. Nahoko Shindo & Sylvie Briand (247) discuss influenza at the beginning of the 21st century, while, in an interview, William Ampofo (254–255) tells Ben Jones why it is essential to track the burden of influenza in Africa.

**The influenza enigma**
Patrick Adams (250–251) reports highlights of the history of influenza research.

**Preventing pneumonia**
Adam I. Cohen et al. (289–294) review pneumonia control options.

**Lessons from the pandemic**
Maria D Van Kerkhove & Neil M Ferguson (306–310) describe how outbreak analysis and mathematical modelling can affect pandemic policy decisions.

**Preparation is key**
Angus Nicoll et al. (311–317) evaluate the next steps for pandemic preparedness in the 21st century.