# Highlights from this issue

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#### Andrew Bush and Ian Pavord, Editors

### T (or Asthma) for two?

This issue of *Thorax* contains a bumper crop of asthma papers. Pregnancy has long been known to be a Th2 phenomenon (and you thought it had something to do with sex!). Forbes et al (see page 209) in the editors' choice paper show that pregnant women have deficient peripheral blood mononuclear cell interferon type I and III responses to rhinovirus infection whether they have asthma or not. The deficiency persists for at least 6 months after pregnancy. This immunological abnormality may explain the well recognised, but by no means universal, phenomenon of worsening asthma during and after pregnancy. No abnormality was identified in non-pregnant women with asthma although a local airway epithelium deficiency of interferon response has been noted by others. In a linked editorial, Busse and Gern (see page 189) speculate that pregnancy might be associated with a systemic immune deficiency (undoubtedly true, or the fetus would undergo immunological rejection), asthma a local mucosal deficiency and asthma in pregnancy the double whammy of both.

#### Resting in peace?

Boyle et al (see page 215) report that use of a commercially available controlled laminar airflow system placed above the bed was associated with a small increase in the number of subjects with a significant improvement in asthma quality of life when compared to a control device. What particularly caught my eye was the significant reduction in exhaled nitric oxide with active treatment. Might it be that, as with anti-IgE, the main impact of allergen avoidance is a reduction in eosinophilic airway inflammation and

associated outcomes such as the frequency of asthma attacks? Could previous allergen-avoidance trials have failed because the assessed outcomes like FEV<sub>1</sub> and symptoms are not closely linked to inflammation? The way forward to preventing asthma lung attacks may be to curb the eosinophilic inflammatory airway soil into which the virus seeds. Petsky and colleagues (see page 199) remind us that management strategies that seek to normalise the sputum eosinophil count are consistently associated with a reduced risk of asthma lung attacks in adults with asthma. This did not appear to be the case in children with severe asthma (see page 193 Fleming et al, hot topic) although the study was potentially flawed because better control of eosinophilic airway inflammation was not achieved. More studies please.

#### Hot on the web

Jennifer Quint has taken us forward by launching a series of Podcasts with the authors of manuscripts in *Lung Alerts*, available on the Thorax website, some of which have associated downloadable slides. Despite the Editors in Chief being too mean to fly her round the world to interview authors face to face, she is continuing with the initiative, for which we are very grateful. She is also looking for fresh young blood to contribute Lung Alerts, so please contact us if you are interested.

## Into the airways of Babes and Sucklings

Pollution is not a good thing for anyone at any time, but you might have thought that very young children who spend more

time inside would be safe from the polluting behaviour of adults in the great outside. Not so; a Danish group have shown that the effects of NO<sub>x</sub>, NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> on hospital admissions are actually stronger for infants than for older children. Previous work has shown that exposure to pollutants is associated with impaired lung growth, but the present data leads to the hypothesis that this impairment will start even earlier, in the really crucial early growth window, with irreversible effects. So is outdoor pollution becoming a child protection issue? Unlikely in the context of policymakers who regard the ravages of the tobacco industry on children as unworthy of direct effective action (see previous Airwaves and Thorax articles, ad nauseam and ad infinitum)! See page 252.

### Blindly helping the blind?

This 67-year-old woman was losing her sight as well as her gas exchange and was immediately ventilated on arrival in hospital, while heads were scratched and diagnoses sorted out. What next, and what is the answer? **Pulmonary puzzle**, see page 273.

