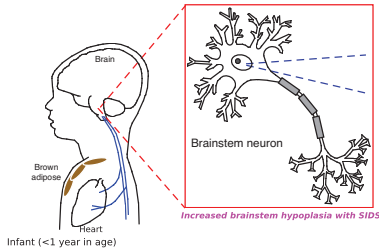


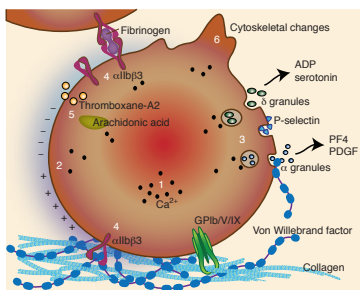
doi:10.1038/pr.2014.100

Systems and sudden infant death



In this issue, Salomonis presents an integrated WikiPathways model for susceptibility to sudden infant death syndrome that includes associated cell systems, signaling pathways, genetics, and animal phenotypes. For further consideration, he also describes new targets that could enrich this model, which, over time, can be developed as a wiki-based, community curation project. [See page 220](#)

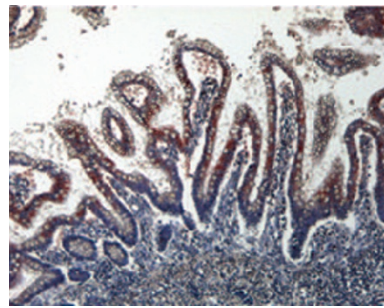
Neonatal platelets



Haley *et al.* review the characterization of neonatal platelets as well as neonatal platelet-transfusion practices, which have important clinical implications for the prevention and treatment of hemorrhage in newborns. [See page 230](#)

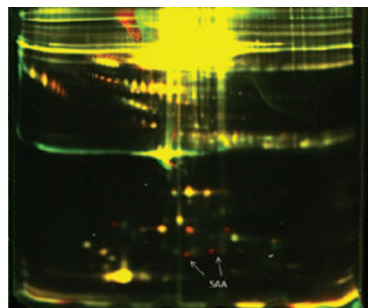
A biomarker for gut maturation

Biomarkers are needed to assess intestinal development around birth. Reisinger and coinvestigators



researched intestinal fatty acid-binding protein (I-FABP) as an indicator of gut maturity in lambs and humans. They found that median serum I-FABP levels were lower in extremely premature lambs than in moderately premature lambs. Contrarily, median early postnatal urine I-FABP levels in human infants were higher in extremely premature newborns than in moderately premature and term newborns. [See page 261](#)

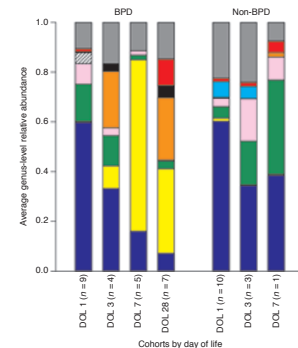
Head trauma and serum amyloid A



Identification of mild abusive head trauma (AHT) is difficult in children because they may present with nonspecific symptoms and no trauma history. Gao and colleagues used two-dimensional difference gel electrophoresis combined with mass spectrometry to compare the serum protein profiles of children with mild AHT to those of age-matched controls. The results suggest that serum amyloid A may be a potential biomarker to identify children with mild AHT.

[See page 280](#)

Airway microbiome of ventilated preterms



Lohmann *et al.* hypothesized that the respiratory microbiota differs between preterm infants who develop bronchopulmonary dysplasia (BPD) and unaffected infants. They examined 25 infants born at ≤ 32 weeks of gestation and intubated in the first 24 hours. The findings show that the airways of premature infants are not sterile at birth. Reduced diversity of the microbiome may be an important factor in the development of BPD.

[See page 294](#)

Genetics and weight



Meng and colleagues examined the association of eight genetic variants with obesity and estimated the cumulative effects of these variants in Chinese children. A case-control study of 2,030 subjects confirmed that two *FTO* single-nucleotide polymorphisms had nominally significant effects on body mass index and obesity.

[See page 310](#)