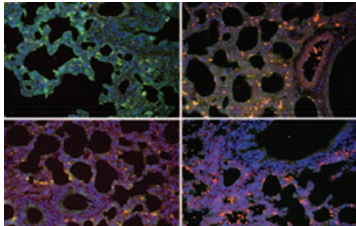


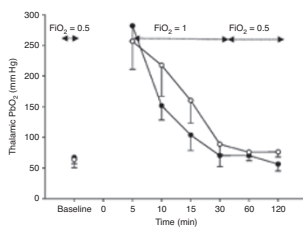
doi:10.1038/pr.2014.6

Lung fibrosis



Receptors for advanced glycation end-products (RAGE) have been implicated in fibrotic processes. Su and colleagues found that RAGE may be involved in the pathogenesis of lung fibrosis induced by maternal systemic inflammation and postnatal hyperoxia in newborn rats. [See page 273](#)

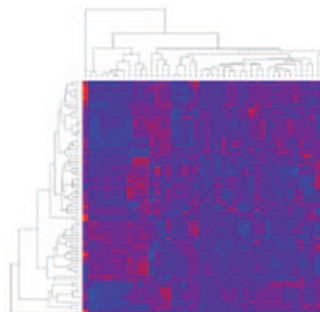
Pediatric cardiac arrest



Manole *et al.* hypothesized that important alterations in regional partial pressure of brain tissue oxygen (PbO₂) occur after resuscitation from pediatric cardiac arrest (CA), and that clinically relevant interventions would influence PbO₂. Cortical and thalamic PbO₂ were monitored in immature rats subjected to CA and in sham-operated rats. Marked regional variability of cerebral oxygenation was noted in the group of rats with CA. [See page 295](#)

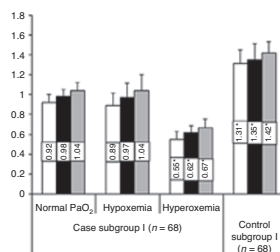
Neuroblastoma analysis

Risk classification and treatment stratification for cancer patients is restricted by our incomplete picture



of interactions between the patient's organism and tumor tissues. On the basis of their multiparametric analysis of 184 tumor specimens, Tadeo and coinvestigators suggest that bioinformatic analysis of patient-tumor-microenvironment data might help generate a predictive model of neuroblastoma. [See page 302](#)

Cerebral blood flow velocity



Cerebral blood flow (CBF) varies widely in sick newborns, for reasons that are not completely understood. In a study of 98 newborns with respiratory distress, Basu and colleagues found that, depending on gestational age, hyperoxemia and hypoxemia were associated with CBF velocity. [See page 328](#)

Transfusion reduction in infants

Anemia in very-low-birth-weight (VLBW) preterm infants is treated with red blood cell transfusions (RBCTx). Rosebraugh and coinvestigators tried to calculate the extent to



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which the need for RBCTx could be decreased by reducing laboratory blood loss and treating infants with pharmacodynamically optimized erythropoietin. They studied 26 ventilated VLBW infants receiving RBCTx during the first month of life and predicted marked decreases in the need for RBCTx following erythropoietin treatment combined with reductions in blood loss. [See page 336](#)

Low birth weight and obesity



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Hack *et al.* examined the trajectory and correlates of growth among extremely-low-birth-weight (ELBW) adolescents. At 14 years of age, ELBW children did not differ from their non-ELBW peers in measures of obesity. The authors suggest that maternal body mass index and rate of growth in neurologically normal ELBW infants might predict obesity by age 14. [See page 358](#)