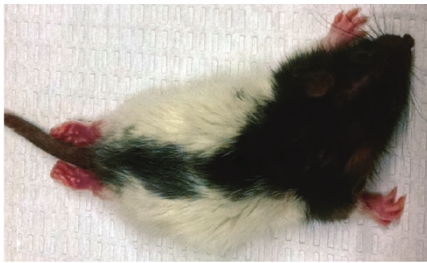


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Cardiac arrest and the neuronal motor network



To characterize neuronal motor network changes after cardiac arrest, Aravamuthan and Shoykhet recorded from the entopeduncular nucleus (EPN) and the primary motor cortex (MCx) in lightly sedated rats under neuromuscular blockade. Rats then underwent 9.5 minutes of asphyxial cardiac arrest. Six months after injury, survivor rats demonstrated greater coherence between EPN single neurons and MCx local-field potentials, indicating abnormal synchrony in their neuronal motor networks. [See page 371](#)

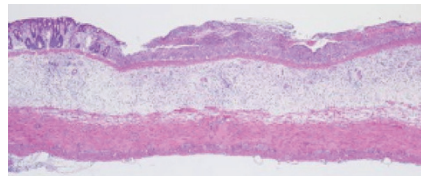
Neonatal pneumonia



Term newborns with pneumonia exhibit reduced pulmonary compliance due to factors that have not been well defined. D'Aronco and coauthors aimed to explore changes in surfactant protein (SP) during pneumonia in term newborns. In 28 term ventilated newborns, they measured SP-B, SP-A, disaturated phosphatidylcholine, and total phospholipid concentrations in tracheal aspirates at intubation and

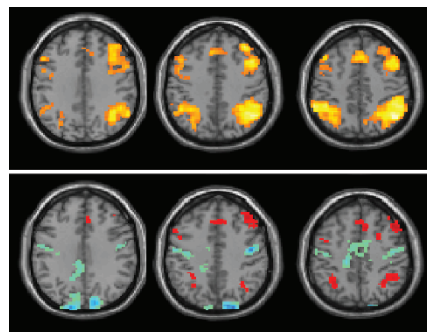
close to extubation. Among other findings, SP-B was 3.5-fold higher in infants with pneumonia than in controls. [See page 401](#)

Bifidobacterium breve M16V



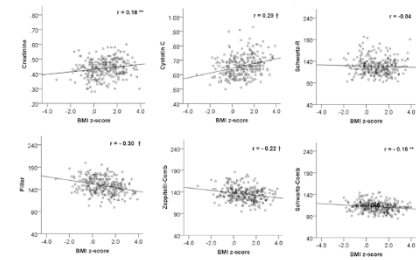
Izumi and coinvestigators evaluated the effects of *Bifidobacterium breve* M16V (M16V) administration on normal and inflammatory conditions in weanling rats. From postnatal day (PD) 21 to 34 weanling rats were administered M16V, and from PD28 to 35 colitis was induced by administration of 2% dextran sulfate sodium. M16V administration appeared to be safe and ameliorated some, but not all, of the changes induced by colitis. [See page 407](#)

Working memory and nocturnal enuresis



Using functional magnetic resonance imaging, Zhang and coauthors investigated brain-function abnormalities that are specifically related to working memory in 20 children with primary monosymptomatic nocturnal enuresis (PMNE). Children with PMNE exhibited decreased cerebral activation in the task-positive network, increased task-related cerebral deactivation during a working-memory task, and longer response times. [See page 422](#)

Renal function and obesity



Obesity is a potentially modifiable risk factor for the development and progression of kidney disease. Correia-Costa and colleagues studied the association between obesity and renal function in children by comparing estimated glomerular filtration rates (eGFRs) in 163 nonoverweight and 150 overweight/obese children. Prepubertal overweight children show significantly lower GFR estimations, probably representing some degree of renal impairment associated with the complex effects of adiposity. [See page 436](#)

High blood pressure and IUGR



Programming of the hypothalamic–pituitary–adrenal (HPA) axis may explain the relationship between intrauterine growth restriction (IUGR) and elevated blood pressure in later life. de Jong *et al.* took serum and saliva samples for cortisol measurement at both 6 months and 2 years corrected age from children participating in the randomized controlled Neonatal Insulin Replacement Therapy in Europe trial. In very-low-birth-weight boys, a positive correlation between cortisol and blood pressure was shown to be present at 2 years corrected age. [See page 476](#)