

EDITOR'S FOCUS

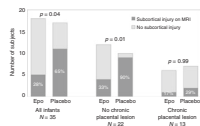
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Early Career Investigator



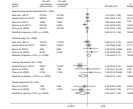
Congratulations to Anna Tottman, the Early Career Investigator for April. Born and raised at the foot of Cooper's Hill in the Cotswolds, Dr. Tottman was the first member of her family to go to college but never foresaw that she would be bitten by the research bug. After an elective in Africa and training in the United Kingdom, she took a position at the National Women's NICU in New Zealand, where she found talented and motivating neonatologist mentors. In her Biocommentary in this issue, she explains how a topic worth investigating came up in a collegial discussion over morning tea. In an accompanying article, she and coauthors report their work on that topic: sex differences in the relationship between nutritional intake and neurodevelopment in preterm infants. Her advice to others early in their career is to keep asking questions. See pages 804 and 872

EPO is effective in patients with HIE and without placental abnormality



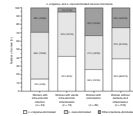
Wu et al. report on 50 newborns with moderate to severe hypoxic-ischemic encephalopathy treated with hypothermia and randomized to receive erythropoietin (EPO) or not. Placentas were reviewed by a blinded pathologist, and brain MRIs were scored. EPO was effective at lowering subcortical injury in infants who lacked chronic placental abnormalities. In an accompanying Comment, Jantzie and Robinson note that using placental pathology as precision medicine may accelerate the progress of neurorepair. See pages 879 and 807

Effect of pre- and probiotic supplementation on preterm infant neurodevelopment



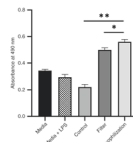
Upadhyay et al. reviewed the literature on outcomes of supplementation of pre- and probiotics in very-low-birth-weight infants. They found that the limited evidence from randomized controlled trials did not demonstrate a difference in neurodevelopmental outcomes at 18–22 months corrected age. Accompanying the article is an Insights Image depicting mechanisms through which pre- and probiotics might improve neurodevelopment. See pages 811 and 969

Cervical microbiota and prolonged premature rupture of membranes



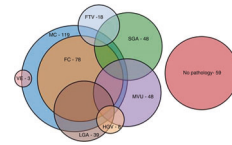
Women with prolonged premature rupture of membranes are at risk of microbial invasion of the amniotic cavity. Kacerovsky et al. report that women with *Lactobacillus crispatus*-dominated cervical microbiota were less likely to have intra-amniotic complications and their infants were less likely to develop early-onset sepsis. See page 952

Feasibility of lyophilizing hAF and maintenance of trophic factors



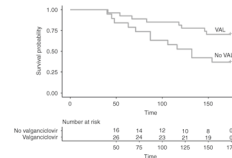
Fetuses routinely swallow amniotic fluid containing trophic factors thought to be important in the development of the gastrointestinal tract. Preterm birth disrupts the availability of human amniotic fluid (hAF). Coon et al. investigated the effect of lyophilization on the activity of trophic factors in hAF with an eye toward eventually using hAF supplementation as a preventative for the development of necrotizing enterocolitis. See page 847

Placental pathology and BPD, death, and neurodevelopmental impairment



Mir et al. studied 241 infants less than 29 weeks gestation to determine the relationship between placental lesions and outcomes. Using logistic regression, they found that higher numbers of placental lesions were associated with an increased risk of moderate to severe bronchopulmonary dysplasia (BPD). In an accompanying commentary, Bhandari and Lodha caution us that this finding requires further study. See pages 885 and 809

Valganciclovir prophylaxis delays onset of EBV viremia in solid-organ transplant patients



In a retrospective study of a cohort of solid-organ transplant patients, prophylaxis with valganciclovir for cytomegalovirus was found to significantly increase the time of onset of Epstein-Barr virus (EBV) viremia. EBV viremia during the height of immunosuppression increased the risk of post-transplant malignancies and loss of transplant function. In a related Insights article, the mother of a child with a liver transplant describes the experience. See pages 892 and 967