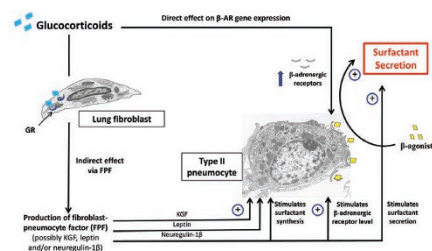


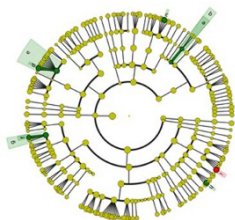
doi:10.1038/pr.2016.171

Fibroblast pneumocyte factor



Glucocorticoid induction of pulmonary surfactant involves a mesenchyme-derived protein termed fibroblast pneumocyte factor (FBF). This review by King and coauthors examines the evidence that keratinocyte growth factor, leptin, or neuroregulin-1 β acts as FBF or components of it. [See page 768](#)

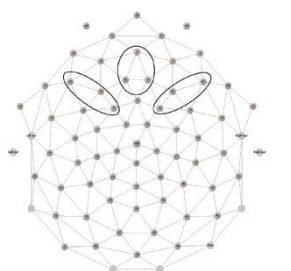
Placental microbiota in gestational diabetes



Bassols and coinvestigators profiled the placental microbiota and microbiome in women with gestational diabetes (GDM) and studied their relationship with maternal metabolism and placental expression of anti-inflammatory cytokines (AICs). The placental microbiota and microbiome and AIC expression were analyzed in placentas from women with GDM and controls; a distinct profile was found in GDM. The results indicate that GDM may constitute a state of placental microbiota-driven altered immunologic tolerance, making placental microbiota a new target for therapy in GDM. [See page 777](#)

Memory function after neonatal encephalopathy

Using event-related potentials (ERPs), recognition memory function in infants



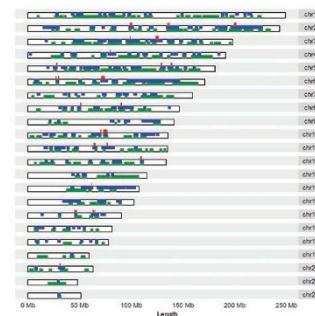
with neonatal encephalopathy (NE) treated with hypothermia was compared with that in healthy controls at 2 weeks of age. ERPs were recorded to each infant's mother's voice alternating with a stranger's voice to assess attentional responses and novelty detection. Development was tested at 12 months using the Bayley Scales of Infant Development. The results indicate that infants with NE preserve memory function after treatment with hypothermia, although there is alteration of the normal lateralization process of brain development. [See page 800](#)

Mutations in mediator complex genes



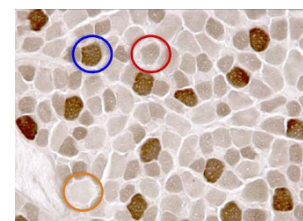
Mutations in the X-linked gene *MED12* cause at least three different entities of syndromic intellectual disability. A syndrome caused by *MED13L* deleterious variants has recently been described, showing similar clinical manifestations. Using next-generation sequencing, Carollopis and colleagues genotyped 1256 genes related with neurodevelopment in three unrelated patients and their healthy parents. Each patient showed one *de novo* variant not previously reported. Noting that the phenotypic consequences of these mutations are similar, the authors propose a common *MED12/MED13L* clinical spectrum. [See page 809](#)

Runs of homozygosity



Runs of homozygosity (ROHs) are consecutive homozygous genotypes that enhance the expression of recessive traits. Uzun *et al.* mapped ROHs in a case-control study of women delivering at term compared with women delivering before or at 34 weeks' gestation. Gene sets known to play a role in preterm birth were examined for overlap with ROH segments. While no significant ROH burden was found, genomic regions were identified that showed significant differences in abundance of overlapping ROH segments in cases versus controls. [See page 829](#)

Creatine and mouse skeletal muscle



LaRosa and colleagues examined creatine's potential to prevent damage to axial skeletal muscles in spiny mice. Mice were delivered by cesarean section one day before term with or without 7.5 minutes of birth asphyxia. Gastrocnemius muscles were obtained for an *ex vivo* study of twitch tension, muscle fatigue, and structural and histochemical analysis. Among other findings, maternal creatine treatment prevented all asphyxia-induced changes in the gastrocnemius and improved motor performance. [See page 852](#)