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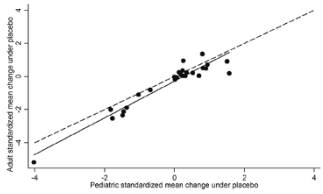
Placebo effects in children

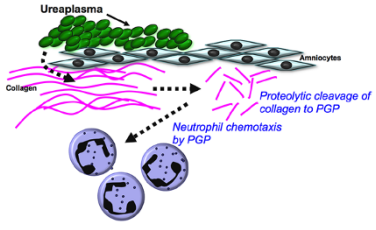


Janiaud and coauthors explored the difference in the placebo effect in children versus that in adults. In a systematic review of the literature to identify drug trials with separate data for both groups, they found that the perceived placebo effect was significantly more favorable in children. This difference seems to be influenced by the design, the disease, and outcomes, indicating that calibration of new studies should carefully take this difference into account. **See page11**

Gestational weight gain

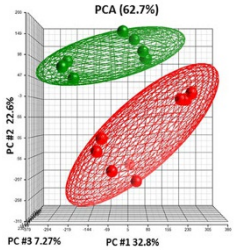
Michaliszyn and colleagues examined the effects of gestational weight gain (GWG) and feeding practices on growth in infants aged 6 to 24 months. Mother–infant pairs were recruited after delivery and followed for 24 months. Infants born to mothers with excess GWG were heavier at birth and had significantly greater waist circumference throughout the time of the study as compared with infants born to mothers with a lower GWG. **See page 63**

Preterm rupture of membranes and chorioamnionitis



Premature rupture of membranes and preterm delivery are associated with *Ureaplasma* infection. Lal and colleagues hypothesized that *Ureaplasma*-induced extracellular collagen fragmentation results in production of the tripeptide proline–glycine–proline, a neutrophil chemoattractant. *Ureaplasma* culture negative amniotic fluid (AF) and *Ureaplasma* positive AF were analyzed by electro-spray ionization-liquid chromatography tandem mass spectrometry for PGP. Among other results, it was found that PGP is increased in amniotic fluid during Ureaplasma infection. **See page 75**

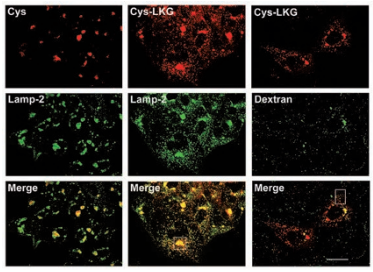
Murine TNBS-enterocolitis models NEC



MohanKumar *et al.* compared gene expression profiles of murine neonatal trinitrobenzene sulfonic acid (TNBS)-mediated intestinal injury and human necrotizing enterocolitis (NEC). Whole-genome microarray analysis was performed on proximal colon from control and TNBS-treated pups; for comparison, human microarray data for NEC and surgical controls were downloaded from a public database. The results appeared to show that murine TNBS-mediated injury and NEC produced similar changes in expression of orthologous genes and activated nearly identical biological processes, signaling pathways, and transcriptional networks. **See page 99**

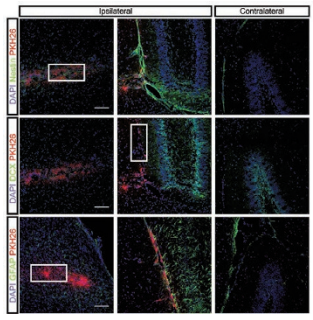
The role of cystinosin-LKG

Taranta and coinvestigators investigated the physiological role of the alternatively spliced isoform cystinosin-LKG, which is widely expressed in epithelial tissues. They analyzed the intracellular localization and function of cystinosin-LKG labeled with RFP in Madin-Darby canine kidney



cells (MDCK II) and in proximal tubular epithelial cells carrying a deletion of the *CTNS* gene, such that only the cystinosin-LKG is expressed (CNTS-PTEC). Cystinosin-LKG colocalized with lysosomes, late endosomes, and the apical surface of MDCK II cells. In CNTS-PTEC, cystinosin-LKG decreased cysteine levels and apoptosis. These results show that cystinosin and cystinosin-LKG have similar functions. **See page 113**

Neural stem cells for brain damage in mice



Braccioli and colleagues explored whether delayed transplantation of allogenic neural stem cells (NSCs) in mice—10 days after hypoxia–ischemia (HI)—could be a tool to repair brain injury. HI was induced in 9-day-old mice. At 10 days post-HI, the animals received either NSCs or vehicle intracranially in the hippocampus. Sensorimotor performance was assessed; and lesion size, synaptic integrity, and the fate of injected NSCs were determined via immunolabeling. NSC transplantation at 10 days postinsult induced long-term improvement of motor performance and synaptic integrity. **See page 127**