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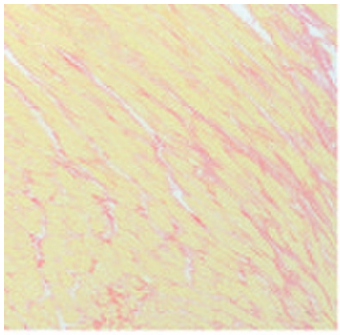
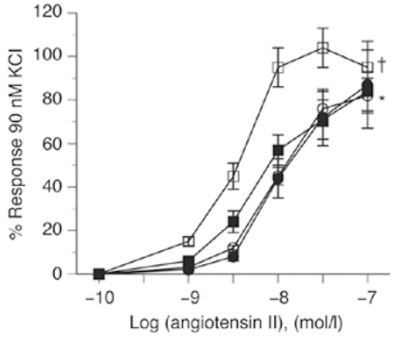
Fetal growth restriction…



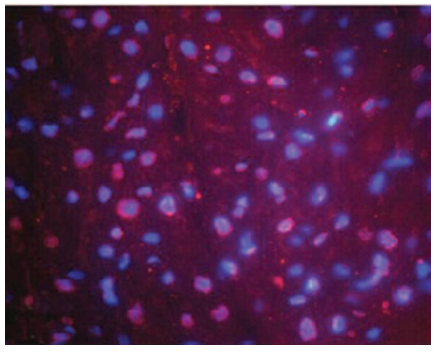
The intrauterine growth–restricted (IUGR) heart is vulnerable to diabetic heart disease. Lim and colleagues examined the effect of induced type 1 diabetes on myocardial collagen deposition and cardiac function in IUGR adult rat offspring when blood glucose levels were controlled. The investigators concluded that exacerbated fibrosis in hyperglycemic IUGR hearts may lead to long-term cardiac dysfunction. **See page 344**

…and hyperglycemia *in utero*



The intrauterine environment strongly influences adult disease susceptibility. Katkhuda and coinvestigators utilized a rat model of third-trimester maternal diabetes to test the hypothesis that adult offspring exposed to hyperglycemia *in utero* display increased blood pressure and alterations in vascular responsiveness. Their findings suggest that this exposure results in sex-specific cardiovascular changes in adult offspring. **See page 352**

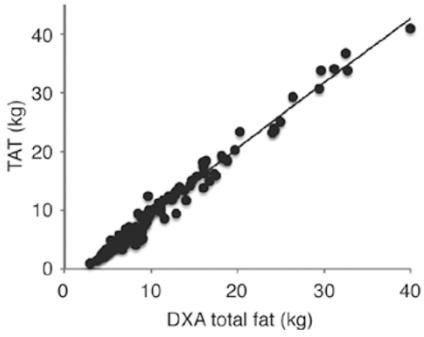
TOF repair and right ventricular dysfunction



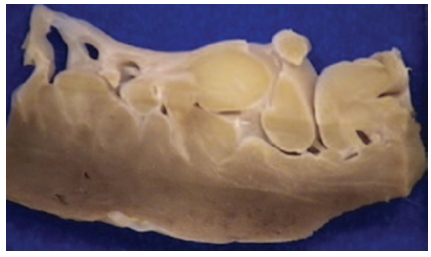
Jeewa and colleagues investigated the association of hypoxia-inducible factor (*HIF1A*) variants with right ventricular (RV) remodeling after repair of tetralogy of Fallot (TOF) in children. They found that after TOF repair, lower numbers of *HIF1A*-functioning alleles were associated with RV dilation and dysfunction. This suggests that hypoxia adaptation in TOF may influence RV phenotype after repair. **See page 407**

Predicting total adipose tissue

The measurement of adipose tissue depots *in vivo* requires expensive imaging methods not accessible to most clinicians and researchers. Bauer *et al.* wrote mathematical models to predict total adipose tissue (TAT) and subdepots from total body fat on the basis of information derived from dual energy X-ray absorptiometry. In general, the prediction equations for TAT and subdepots were consistent with the measured values obtained using one- and two-year follow-up data. **See page 420**



DNAJC19 gene mutation



In their case report of two brothers, Ojala and colleagues propose that a mutation in the human *DNAJC19* gene has a role in early-onset dilated cardiomyopathy syndrome. DNAJC19 is a mitochondrial membrane protein that appears to cause methylglutaconic aciduria type V, one component of the syndrome. **See page 432**

Mind the gap

The 2012 American Pediatric Society's Keynote Presidential Address by F. Bruder Stapleton is featured in this issue. Dr. Stapleton discusses diversity in the pediatric clinical and academic workforce. **See page 441**