

EDITOR'S FOCUS

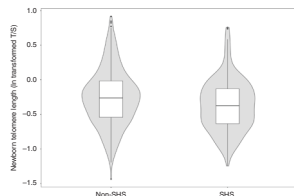
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Early Career Investigator



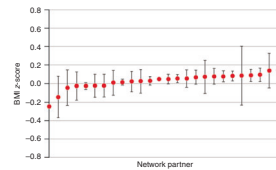
Congratulations to Eniko Szakmar, the Early Career Investigator for May. Dr. Szakmar is both a pediatric resident and a PhD candidate in the 1st Department of Pediatrics at the Semmelweis University in Budapest, Hungary. She has pursued her interest in therapeutics for infants born with neonatal encephalopathy during her training and in her clinical research, and she has studied abroad to enhance her knowledge. In this issue, she and colleagues report on the feasibility and safety of using 5% CO₂ to correct hypocapnia in infants undergoing therapeutic hypothermia. Her advice to others early in their career is to combine clinical work with research and teaching to have the biggest impact. See pages 977 and 1025

Prenatal environmental tobacco smoke exposure shortens telomeres



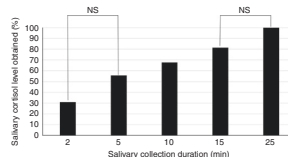
Liu et al., from Wuhan, China, measured telomere length in 762 samples of cord blood. Using linear regression and questionnaire data on smoke exposure, they found that prenatal smoke exposure shortened telomeres. In an accompanying policy commentary, Shah et al. examine morbidities associated with smoking. Vaping appears to be the pathway that leads children to smoking. Current efforts to reduce vaping among teens are outlined. See pages 1081 and 972

A method for using summary data in multicenter pediatric research studies



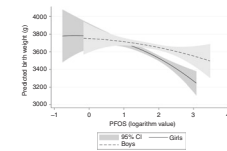
Toh et al. used electronic health data from 34 health-care institutions in the National Patient-Centered Clinical Research Network (PCORnet) to compare two methods for assessing an association. One method used pooled individual data; the other used the conventional multivariable-adjusted regression. The results of 12 multivariable-adjusted linear regression models were virtually the same, meaning that individual information protected by the Health Insurance Portability and Accountability Act does not need to be shared by participating institutions. Commenting on the uses of this technique, and suggesting others, Gardner points out that such approaches are needed to further precision medicine and population health. See pages 1086 and 978

Salivary cortisol as a biomarker of opiate withdrawal in neonates



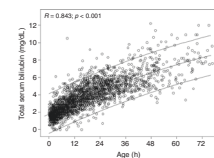
Twenty-two infants with opioid exposure were observed for 4–7 days for signs of withdrawal in this study by Rodriguez et al. Saliva cortisol was measured twice daily. In babies requiring pharmacotherapy for withdrawal, initial high cortisol concentrations persisted, whereas in babies discharged without pharmacotherapy the cortisol concentration dropped. These results suggest that salivary cortisol could be used to send babies home earlier rather than waiting for signs of withdrawal. The accompanying Comment by El-Metwally presents the ramifications of this study. See pages 1033 and 982

First-trimester exposure to PFAS is associated with lower birthweight



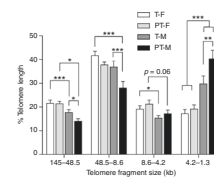
Wikström et al. studied 1533 infants from the Swedish Environmental, Longitudinal, Mother and Child, Asthma and Allergy (SELMA) study. They found an association between exposure to five perfluoroalkyl substances (PFAS) and a decrease in birthweight that was significant in female infants. In a Comment, Anderko summarizes the health effects of PFAS and notes the need for healthy public policy regulating the use of PFAS. See pages 1093 and 980

Rate of rise of total serum bilirubin in VLBW infants



In an analysis of 2430 total serum bilirubin values in 483 very low birthweight (VLBW) infants to determine rate of rise, Hahn et al. found that the rate of rise was faster in lower-gestational-age infants and those with lower birthweight and lower 5-minute Apgar scores. They identified rate of rise as an indicator for early and prolonged phototherapy. In an accompanying Comment, Hulzebos and Tiribelli note that more data are needed to support use of the rate of rise. See pages 1039 and 984

Accelerated aging after preterm birth (<33 weeks)



In a study of 156 adults, those who were born at less than 33 weeks had altered blood pressure, including higher systolic blood pressure. Preterm men had fewer long telomeres and a higher proportion of shorter telomeres. These results indicate faster aging in adults who were born preterm. See page 1005