

EDITOR'S FOCUS

Volume 91 No. 1 January 2022



Early career investigator



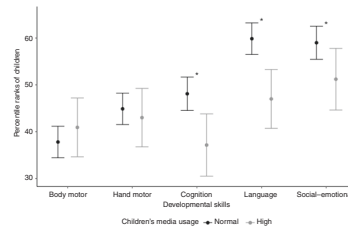
Congratulations to Eric Peebles, the Early Career Investigator for January 2022. Eric grew up in Phoenix, Arizona, and attended Creighton University in Nebraska for his undergraduate and medical degrees. During his undergraduate years, he had the opportunity to work in a basic research lab, thus sealing his research-oriented fate. There followed a fellowship in neonatal-perinatal medicine at the University of Washington and interaction with a series of valuable mentors before landing in his current faculty position at the University of Nebraska with both a clinical and basic research program in newborn brain injury. In this issue, he and co-workers report changes in microRNA in an animal model of neonatal hypoxic-ischemic injury. His recommendations for early-career researchers are to seek out mentors who will give you latitude, and to pursue a question you can't stop thinking about. [See pages 12 and 92](#)

Global pediatric research investigator



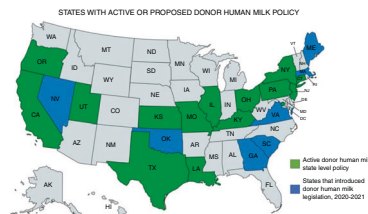
Congratulations to May Nassar, the Global Pediatric Research Investigator for January 2022. Dr. Nassar grew up in Egypt and studied in Cairo, earning a doctorate in pediatrics as well as two master's degrees: one in pediatrics and one in clinical nutrition. She is currently a professor at Ain Shams University. In a study reported in this issue, she and colleagues explored renal calculi resulting from a ketogenic diet, and they describe approaches for minimizing the risk of this malady. In considering the value of mentorship, she remembers the words of her father, a professor: "One day you will feel it is time to pass on the torch, not necessarily because you grew older, but essentially because you have a valuable thing to share." [See pages 13 and 149](#)

Effects of maternal and child media use on early childhood development



In a study of 296 2–5-year-old children, Schwarzer et al. assessed screen times and parent–child interactions in relation to measured developmental skills. Longer child and maternal screen times were associated with poorer developmental outcomes. Higher levels of parent–child interaction improved developmental outcomes. [See page 247](#)

Lipocalin-2 and calprotectin as early biomarkers for NEC



Necrotizing enterocolitis (NEC) is a devastating disease for preterm infants, and early predictors are lacking. Thibault et al. investigated eight biomarkers in stools from 132 very-low-birthweight infants. Lipocalin-2 and calprotectin were the most predictive. While not yet meeting "perfect biomarker" criteria, this finding is an important advance. In an accompanying policy Comment, Shah and Miller point out the disparities across the United States in access to donor breast milk (dBM), which is protective against NEC. In many cases access to dBM is dependent on Medicaid, but coverage varies by state. (Image adapted from ref. 34 and D. O'Connor, personal communication.) [See pages 129 and 14](#)

Mechanism of hypoxia-related poor fetal growth



Dolma et al. compared characteristics of 316 infants born at high altitude with 101 infants born at low altitude. Characteristics associated with birthweight

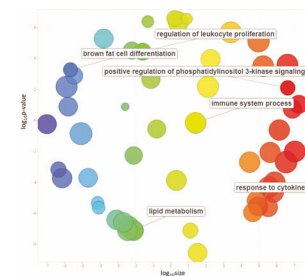
>tenth weight centile included increased maternal body mass index, age, and uterine artery diameter. In an accompanying Comment, Moore reviews the proposed mechanisms of hypoxia-induced reduction in fetal growth and calls for more studies using this information for intervention. [See pages 137 and 17](#)

Effects of stress on pediatric subspecialists before and during COVID



Kase et al. measured burnout, compassion fatigue, and compassion satisfaction in pediatric subspecialists before and during the COVID pandemic. Surprisingly, they found no difference between prepandemic and early pandemic scores. They also analyzed the factors related to higher scores in each category. The authors suggest that institutions may mitigate some of burnout and compassion fatigue through targeted interventions aimed at conveying to physicians that they are valued. In an accompanying Comment, Sanford and Zupanc urge that advantage be taken of the current situation to emphasize physician well-being and to provide frontline healthcare workers with mental health support. (Photo: Moyo Studio/Getty.) [See pages 143 and 19](#)

Molecular mechanism of adiposity following intrauterine growth restriction



Catch-up growth following intrauterine growth restriction may lead to visceral adiposity and metabolic abnormalities. Lizarraga-Mollinedo et al. investigated the mechanism using a rat model. They identified 546 differentially expressed genes related to immune and lipid metabolic processes, brown fat cell differentiation, and regulation of P13K. Further study of these dysregulated genes in white adipose tissue may lead to development of novel interventions to prevent metabolic abnormalities associated with catch-up growth. [See page 107](#)

Acknowledgements

Cynthia F. Bearer and Eleanor J. Molloy.