

EDITOR'S FOCUS

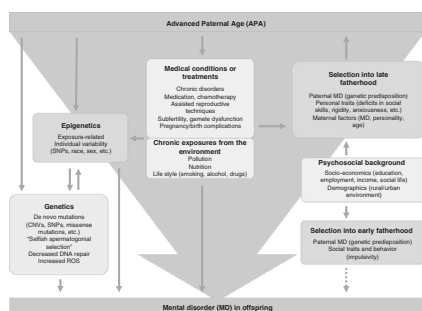
Volume 91 No. 4 March 2022

EARLY CAREER INVESTIGATOR



Congratulations to Rose Gelineau-Morel, the Early Career Investigator for March 2022. Rose received an honors degree in neurobiology from Baylor College of Medicine in Texas. During that period she completed a research year in neuroimaging at the University Oxford. Her residency and fellowship training at Cincinnati Children's Hospital and Children's Mercy Hospital in Kansas City spurred her interest in children with cerebral palsy and dystonia. As reported in this issue, she and colleagues developed a Kernicterus Spectrum Disorders Toolkit to predict the likelihood of these disorders. She is also developing personalized treatments for dystonias, investigating the impact of pharmacogenomics on the disposition of trihexyphenidyl. Her advice to others early in their career is to "follow your patients' lead, as they are your best guides" as well as to choose mentors who will help you attain your goals. In an accompanying Family Reflections essay, Susan Haas, the president of Parents of Infants and Children with Kernicterus, describes the difficult journey to obtain a diagnosis, which is crucial for the patients, their families, and their healthcare providers. She notes that accurate diagnosis also supports recognition of the disorder by researchers and funding sources, which in turn may increase preventive efforts. See pages 724, 862, and 1006.

A MULTIFACTORIAL MODEL OF THE ETIOLOGY OF NEUROPSYCHIATRIC DISORDERS



Approximately one in every four people suffers from a mental disorder (MD). Lack of

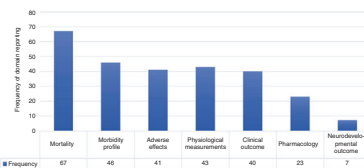
understanding of the mechanisms underlying MDs hinders mental health care. In a Review Article, Vervoort et al. present a multifactorial model of causation of MDs. The model incorporates paternal age, (epi)genetics, medical conditions/therapy, and psychological and environmental conditions. This model may be used not only to study preventive measures but also to guide education, counseling, screening, and treatment. In a related Comment, Stroustrup focuses on the association between advanced paternal age and MDs in offspring. See pages 757 and 729.

DETERMINANTS OF NEONATAL, POST-NEONATAL, AND CHILD MORTALITY IN AFGHANISTAN



In their evaluation of 32,712 live births registered in the 2015 Afghanistan Demographic Health Survey, Forde and Tripathi studied determinants of mortality in children under the age of 5. For neonatal, post-neonatal, and child age strata, breastfeeding status and birth order were associated with mortality. Other factors associated with mortality in at least one stratum included maternal age, number of births (if any) in the previous year, non-institutional delivery, parents' occupations, and size of the baby. In all three strata, the presence of community frailty was observed; the next steps are identification of vulnerable communities and implementation of targeted strategies for prevention. Photo: FatCamera/Getty. See page 991.

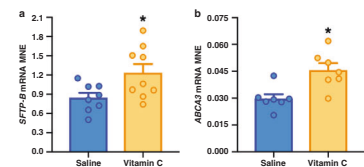
NEONATAL SEPSIS: CORE OUTCOMES FROM CLINICAL TRIALS



Although neonatal sepsis is common, especially in preterm infants, there is no internationally accepted definition. Data synthesis requires standardized study definitions and outcomes, and core outcome datasets are

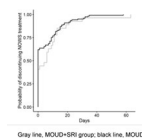
needed to provide evidence and consensus to ensure similar outcomes in clinical trials. Henry et al., in a systematic review of outcomes in 90 neonatal sepsis trials, found 88 different outcomes, highlighting the need to develop core outcome datasets. In a Comment, Flannery and Puopolo discuss the complexity of defining neonatal sepsis and outcomes and the need for consensus. See pages 735 and 733.

MATERNAL DAILY VITAMIN C TREATMENT AND LUNG MATURATION IN FETAL SHEEP



Balance between pro- and antioxidant status in pregnancy is related to pregnancy complications and, possibly, to neonatal complications and lung function. McGillick et al. studied the effect of a month of intravenous maternal vitamin C treatment on fetal lung in late gestation in sheep, specifically the effects on gene and protein expression involved in lung maturation. The vitamin C treatment increased gene but not protein expression. See page 828.

SRIS AND SEVERITY OF NEONATAL OPIOID WITHDRAWAL SYNDROME



Bakhireva et al. studied 18 mother-infant pairs with prenatal exposure to medications for opioid use disorder (MOUD) and serotonin reuptake inhibitors (SRIs) and found that SRI use in pregnant women on MOUD medications was associated with more severe neonatal opioid withdrawal syndrome. In their related Comment, Lester and Davis note the increase in polypharmacy in drug use disorders in pregnancy and the need for new approaches to prevention and treatment. See pages 867 and 727.

ACKNOWLEDGEMENTS

Eleanor J. Molloy and Marije Hogeveen.