

### **Pediatric RESEARCH**

### **EDITOR'S FOCUS**

Volume 84 No. 1 July 2018

## Early Career Investigator (Tanzania)



Congratulations to Georgies Mgode, July's Early Career Investigator. He was born and now lives in Tanzania after training in such diverse places such as Pretoria, South African, and Berlin, Germany. His commentary describes how his interest in rodents' diagnostic capabilities grew along with his leadership positions. In a study reported in this issue, he and his colleagues demonstrated the ability of African giant pouched rats to smell the volatile organic compounds emitted by tuberculosis. He urges early-stage investigators to be research-focused even in low-resource situations. **See pages 3 and 99** 

# Interventions to reduce the impact of social determinants of health



In their review, Beck et al. describe the mechanistic links between social determinants and health outcomes, the need for intervention for these social needs, and the challenges to research on social needs interventions. See page 10

Heavy backpacks and back pain in adolescents in Spain



Rodríguez-Oviedo et al. conducted an intervention trial to reduce the prevalence of carrying heavy backpacks in Lugo, Spain. The intervention successfully reduced back pain in third-year high school girls. The authors concluded that an inexpensive intervention may reduce back pain in adolescents. **See page 34** 

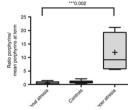
#### Adapting a screener for children with special health care needs in Egypt



The prevalence of children with special health care needs (CSHCN) is difficult to identify in low-resource countries, including Egypt. Wahdan and El-Nimr translated the CSHCN Screener (developed through the Child and Adolescent Health Measurement Initiative) into Arabic, then adapted it for use in a community-based survey in Alexandria, Egypt. They were able to describe the prevalence of such needs as well as prevalent conditions. See page 57

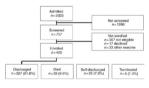
### Heme precursors are altered in pathological pregnancies (France)

Manceau et al. investigated the biosynthetic pathways for heme, a critical



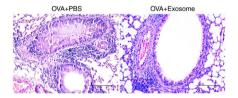
prosthetic for numerous proteins. In general, the precursor levels decreased during pregnancy. The hepatic origin of the precursors was evident in fetuses with upper gastrointestinal obstruction. **See page 80** 

### Predictors of mortality in severe acute malnutrition in Uganda



In 400 children 6–59 months of age admitted for several acute malnutrition, Nabukeera-Barungi et al. found that associated infections were linked to a higher risk of death. Proxies for infection included diarrhea, suspected sepsis, skin ulcers, and HIV infection. **See page 92** 

## Exosomes from *P. aeruginosa* protect against asthma (China)



Ding et al. administered exosomes prepared from *Pseudomonas aeruginosa* into female mice prior to sensitization with either ovalbumin or house dust mites. They found less airway hyperresponsiveness, inflammation, and serum IgE, and an increase in regulatory T-cell response. **See** page 125