

## IN BRIEF

## DIABETES

Gain-of-function mutations in *KCNJ11*, which encodes an ATP-sensitive potassium ( $K_{ATP}$ ) channel subunit, cause neonatal diabetes. The origin of the motor impairments seen in patients with this condition has been unclear. A study now reveals that mice harboring a mutant allele of human *KCNJ11* show motor deficits similar to those seen in neonatal diabetes, but only when the mutant subunit is expressed in CNS neurons. Thus, according to the researchers, therapies for such deficits should target neuronal rather than muscle  $K_{ATP}$  channels.

**Original article** Clark, R. H. *et al.* Muscle dysfunction caused by a  $K_{ATP}$  channel mutation in neonatal diabetes is neuronal in origin. *Science* **329**, 458–461 (2010)

## MULTIPLE SCLEROSIS

Patients with multiple sclerosis (MS) often exhibit cognitive deficits, which can be difficult to detect reliably. Lechner-Scott *et al.* compared the capabilities of the Audio Recorded Cognitive Screen (ARCS), a recently described 5 min cognitive assessment, and the more-established Paced Auditory Serial Addition Test (PASAT) to detect such deficits. In this study, 87 patients with MS completed both tests, with the investigators finding that the ARCS was more sensitive than the PASAT for the detection of impairment in any cognitive domain.

**Original article** Lechner-Scott, J. *et al.* The Audio Recorded Cognitive Screen (ARCS) in patients with multiple sclerosis: a practical tool for multiple sclerosis clinics. *Mult. Scler.* doi:10.1177/135245854743

## NEUROINFLAMMATION

No reliable biomarkers for neurosarcoidosis (NS) exist, even though this condition is an important differential diagnosis of multiple sclerosis. A new study has shown that, on a background of patients with various noninfectious CNS-related diseases, soluble interleukin 2 receptor (sIL-2R) levels in cerebrospinal fluid (CSF) >150 pg/ml identify patients with untreated NS with an overall accuracy on 93%. The researchers suggest that knowledge of sIL-2R CSF levels might assist clinicians in the diagnosis of NS.

**Original article** Petereit, H.-F. *et al.* Soluble CSF interleukin 2 receptor as indicators of neurosarcoidosis. *J. Neurol.* doi:10.1007/s00415-010-5623-3

## DEMENTIA

Berr *et al.* report that occupational exposure to solvents is associated with cognitive impairment in later life. Using two different psychological tests, the investigators examined the cognitive performance of 5,242 individuals (aged 55–60 years) who had been exposed to solvents during their careers. The results of the study showed that exposure to ‘chlorinated’, ‘aromatic’, or ‘petroleum’ solvents, or to high levels of benzene, conferred an increase in risk of later cognitive deficits.

**Original article** Berr, C. *et al.* Occupational exposure to solvents and cognitive performance in the GAZEL cohort: preliminary results. *Dement. Geriatr. Cogn. Disord.* **30**, 12–19 (2010)