

## PHARMACOLOGY

Trafficking CD11b-positive blood cells deliver therapeutic genes to the brain of amyloid-depositing transgenic mice

Lebson, L. *et al. J. Neurosci.* 30, 9651–9658 (2010)

Lebson *et al.* have shown that CD11b<sup>+</sup> bone marrow cells not only migrate to amyloid plaques in transgenic Alzheimer disease mice, but also, when expressing a genetically engineered form of neprilysin, can inhibit further amyloid deposition. The researchers argue that the capability of such cells to enter the CNS and home in on sites of injury might be harnessed in gene therapy strategies for a range of CNS diseases.

## PARKINSON DISEASE

Olfactory impairment in Parkinson's disease and white matter abnormalities in central olfactory areas: a voxel-based diffusion tensor imaging study

Ibarretxe-Bilbao, N. *et al. Mov. Disord.* doi:10.1002/mds.232082

In patients with Parkinson disease (PD), olfactory dysfunction can be apparent several years before motor symptom onset. Diffusion tensor imaging in a small group of patients in the early stages of PD shows, for the first time, that the degree of olfactory dysfunction correlates positively with the extent of microstructural white matter reduction in the olfactory system.

## STROKE

Omega-3 polyunsaturated fatty acid supplementation confers long-term neuroprotection against neonatal hypoxic–ischemic brain injury through anti-inflammatory actions

Zhang, W. *et al. Stroke* doi:10.1161/STROKEAHA.110.586081

Few options are available to combat hypoxic–ischemic injury in neonates. Zhang *et al.* have now demonstrated that supplementation of the diet of pregnant rats with omega-3 polyunsaturated fatty acids confers a neuroprotective effect against hypoxic–ischemic injury to their neonates. The data indicate that this effect is achieved, in part, by suppression of an inflammatory response mediated by microglia.

## PARKINSON DISEASE

White matter microstructure changes in the thalamus in Parkinson disease with depression: a diffusion tensor MR imaging study

Li, W. *et al. AJNR Am. J. Neuroradiol.* doi:10.3174/ajnr.A2195

Li *et al.* have shown that among individuals with Parkinson disease (PD), those with depression have greater microstructural changes in the white matter of the mediodorsal thalamus—as revealed on fractional anisotropy maps from diffusion tensor imaging—than those without depression. The researchers conclude that this brain region might have an important role in the development of depression in PD.