Nature Reviews Neurology **10**, 124 (2014); published online 25 February 2014;
doi:10.1038/nrneurol.2014.32;
doi:10.1038/nrneurol.2014.33;
doi:10.1038/nrneurol.2014.34;
doi:10.1038/nrneurol.2014.35

IN BRIEF

NEURAL REPAIR AND REHABILITATION

A prosthetic hand restores natural sensory feedback

Bidirectional hand prostheses can provide basic sensory feedback, enabling people with hand or arm amputation to control objects in a more precise and naturalistic manner. Raspopovic *et al.* connected electrodes in the prosthetic hand to the remnant arm nerves of an individual who had lost a hand, providing not only motor control of the prosthetic hand, but also sensory feedback. After the operation, the blindfolded participant was able to identify physical characteristics of different objects and modulate their grasp.

Original article Raspopovic, S. *et al.* Restoring natural sensory feedback in real-time bidirectional hand prostheses. *Sci. Transl. Med.* **6**, 222ra19 (2014)

NEURO-ONCOLOGY

MicroRNA-124-5-p is a novel prognostic biomarker and potential treatment target in glioblastoma

A new study shows that inhibition of laminin-8 expression by the microRNA miR-124-5p can slow down progression of high-grade glioma, such as glioblastoma. In high-grade glioma, expression of laminin-8, a membrane glycoprotein previously shown to predict tumour recurrence and patient survival, was increased and miR-124-5p expression was decreased, making miR-124-5p a candidate biomarker for high-grade glioma. In glioma xenografts, downregulation of laminin-8 activity through RNA interference or restoration of miR-124-5p expression suppressed angiogenesis and tumour growth.

Original article Chen, Q. *et al.* MiR-124-5p inhibits the growth of high-grade gliomas through posttranscriptional regulation of LAMB1. *Neuro Oncol.* doi:10.1093/neuonc/not300

STROKE

Collateral circulation after ischaemic insult predicts good clinical outcome after endovascular treatment

Good collateral circulation grade at angiography was associated with increased recanalization and reperfusion, and better clinical outcome in the endovascular treatment arm of the Interventional Management of Stroke (IMS) III trial, the largest endovascular trial to date. Age, sex or baseline stroke severity score did not correlate with angiographic grade. The results could aid identification of patients who are most likely to benefit from endovascular therapy.

Original article Liebeskind, D. S. *et al.* Collaterals at angiography and outcomes in the Interventional Management of Stroke (IMS) III trial. *Stroke* doi:10.1161/STROKEAHA.113.004072

PARKINSON DISEASE

No evidence for disease-modifying or neuroprotective effects of subthalamic nucleus stimulation in PD

High-frequency deep brain stimulation of the subthalamic nucleus (STN-DBS) offers only symptomatic relief for patients with Parkinson disease (PD), a new study shows. The researchers compared 81 patients receiving STN-DBS for PD with 144 PD patients who did not receive this treatment. The groups did not show significant differences in motor scores or mortality. These findings contradict previous suggestions that STN-DBS might slow down or halt the progression of PD.

Original article Lilleeng, B. *et al.* Progression and survival in Parkinson's disease with subthalamic nucleus stimulation. *Acta Neurol. Scand.* doi:10.1111/ane.12224