

SBS Seminar Announcement

Brain pacemaker to lift depression: which target(s)?

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Abstract:

Deep brain stimulation (DBS) is a promising therapy for patients with refractory depression. However, one key issue is which brain target (s) should be used for DBS, since several regions have been targeted with favorable outcome. To address this issue, we investigated the effect of DBS of different brain regions on a variety of mood related behavioural parameters using translational research methods utilizing animal models. In naïve rats and rats subjected to unpredictable chronic mild stress, we found that high-frequency stimulation of the ventromedial prefrontal cortex (vmPFC) produced not only the most potent antidepressant effects (reduced behavioral despair and anxiety) but also increased the levels of motivation and hedonia. Our findings identify the vmPFC as a potent modulator of mood related behaviours and as a favorable target for DBS in refractory depression.

Tuesday, 25 June 2013 2.30pm – 3.30pm SBS Classroom 2 (SBS-B1n-22)
Host: Professor Mark Featherstone