

東北大学脳科学 GCOE セミナーのお知らせ

日時 2008年7月11日(金)16:30~18:00

会場 星陵キャンパス・1 号館2階 大会議室

演者 Dr. Seong-Seng Tan (Howard Florey Institute, University of Melbourne, Australia)

演題 Neuroprotection in brain injury and stroke - the role of protein ubiquitination and exosomes -

We have discovered a new protein, Ndfip1, that is critical for protecting neurons from apoptosis during stress injury. Ndfip1 upregulation in central neurons is a generic protective response during brain trauma, stroke and retinal ischemia. This talk will discuss the molecular mechanisms of Ndfip1 neuroprotection, and provide evidence for rapid protein disposal by ubiquitination and exosome export.

Gunnersen JM, Kim MH, Fuller SJ, De Silva M, Britto JM, Hammond VE, Davies PJ, Petrou S, Faber ES, Sah P, **Tan SS** (2007) Sez-6 proteins affect dendritic arborization patterns and excitability of cortical pyramidal neurons. *Neuron* 56(4):621-639

Hammond V, So E, Gunnersen J, Valcanis H, Kalloniatis M and **Tan SS** (2006) ☐ Layer positioning of late-born cortical interneurons is dependent upon Reelin but not p35 signaling. ☐ *J Neurosci* 26:1646-1655 Britto JM, Obata K, Yanagawa Y and **Tan SS** (2006) ☐ Migratory response of interneurons to different regions of the developing cortex. ☐ *Cereb. Cortex* 16:i57-63

Sang Q, Kim M, Kumar S, Bye B, Morganti-Kossman MC, Gunnersen J, Fuller S, Howitt J, Hyde L, Beissbarth T, Scott HS, Silke J and **Tan SS** (2006)□ Nedd4-WW domain-binding protein 5 (Ndfip1) is associated with neuronal survival following acute cortical brain injury. □ *J Neurosci* 26:7234-7244

Kim MH, Gunnersen JM and **Tan SS** (2005) Mph2 expression in germinal zones of the mouse brain *Dev. Dyn* 232:209-215

George AJ, Holsinger RM, McLean CA, **Tan SS**, Scott HS, Cardamone T, Cappai R, Masters CL and Li QX (2005) Decreased phosphatidylethanolamine binding protein expression correlates with Abeta accumulation in the Tg2576 mouse model of Alzheimer's disease. *Neurobiol. Aging* 27:614-623

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