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Representative Publications:

Ince NF, Gupte A, Wichmann T, Ashe J, Henry T, Bebler M, Eberly L, **Abosch A**. Selection of Optimal Programming Contacts Based on Local Field Potential Recordings from Subthalamic Nucleus in Patients with Parkinson's Disease. *Neurosurgery*, 2010, *in press*.

Chhabra V, Sung E, Holder C, Mewes K, Bakay RAE, **Abosch A**, Gross RE. Safety of Magnetic Resonance Imaging of Deep Brain Stimulator Systems: A Serial MRI and Clinical Retrospective Study. *J Neurosurgery* Aug 14, 2009.

Roark C, Whicher S, **Abosch A**. Reversible neurologic symptoms caused by diathermy in a patient with deep brain stimulators. *Neurosurgery* 62(1):E256, 2008.

Abosch A, Kapur S, Lang, AE, Hussey D, Sime E, Miyasaki J, Houle S, Lozano AM. Stimulation of the Subthalamic Nucleus in Parkinson's disease does not produce Striatal Dopamine Release; *Neurosurgery* 53(5):1095-1102, 2003.

Abosch A, Hutchinson WD, Saint-Cyr JA, Dostrovsky JO, Lozano AM. Movement-related neurons of the subthalamic nucleus in patients with Parkinson disease; *J Neurosurg* 97(5):1167-1172, 2002.