



## THE NEUROSURGICAL TREATMENT OF SPASMODIC DYSPHONIA: THINKING OUTSIDE THE VOICE BOX

*The National Spasmodic Dysphonia Association is funding a grant investigating the effectiveness of Deep Brain Surgery (DBS) for the treatment of spasmodic dysphonia. This research is being led by Dr. Christopher Honey. Dr. Honey is a Professor of Neurosurgery at the University of British Columbia. He obtained his medical degree from the University of Toronto and his doctoral degree from Oxford University as a Canadian Rhodes Scholar. He completed his Royal College training in neurosurgery in Vancouver. Dr. Honey's team includes three nurses dedicated to DBS, a research coordinator, and a clinical fellow (neurosurgeon studying DBS).*

### Why did you decide to study Deep Brain Stimulation for spasmodic dysphonia?

Our Center has one of the world's largest experiences with deep brain stimulation (DBS) for the treatment of a variety of neurological conditions including Parkinson's disease, dystonia, and tremor. We were surprised and delighted when two of our patients who had had routine DBS for their limb tremor subsequently reported that their spasmodic dysphonia (SD) had unexpectedly improved. We investigated these patients and discovered what we believe to be the brain pathway involved in SD. Our research has now continued with funding from the NSDA to a phase 1 trial to determine the safety and effectiveness of DBS for SD. This trial will test how DBS affects the voice and quality of life of six patients with SD. The recruitment for the trial is now closed and we expect to be able to report our results next year.

### How do you expect this research to be helpful?

We hope that this new therapy will offer another treatment option for patients with SD and specifically will help those who do not get a good benefit from current medical management. For the last 30 years, treatment for spasmodic dysphonia has focused on the resultant abnormal muscular movements of the vocal cords. Treatments such as botulinum toxin injections are designed to weaken those muscles rather than to fix the underlying problem and thus, when the Botox® wears off, the problem comes back. Our studies are directed at the underlying cause of SD. Our research has also provided a unique opportunity to study how the brain produces speech. Our team is grateful to the National Spasmodic Dysphonia Association for their support of our research.

**For more information about Dr. Honey, please log on to [www.drhoney.org](http://www.drhoney.org).**

## SD RESEARCHER UPDATE



**Dr. Teresa Kimberley**, whose pilot spasmodic dysphonia grant was funded by the NSDA, has moved from the University of Minnesota to Mass General Hospital Institute of Health Professions (MGH IHP) in Boston, MA. She will be leading the Brain Recovery Lab at the MGH Institute of Health Professions and continuing her work in focal dystonias, including spasmodic dysphonia. "The opportunity to collaborate with the wealth of expertise in the Boston area and the world-renowned imaging facilities at MGH were big drivers for the move," Dr. Kimberley said. She looks forward to connecting with area SD support groups in New England. Her new NIH R01 project will continue to recruit patients with focal hand dystonia, abductor spasmodic dysphonia and healthy control participants with a goal of understanding the brain dysfunction in focal dystonia and developing novel treatment options.