



May 2017 News

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If you are reading this newsletter for the first time, please visit the [ABOUT](#) section on the [WIKISTIM home page](#). This section describes WIKISTIM's unique resources and is accessible without registration.

GRANT FROM BOSTON SCIENTIFIC

We are delighted to announce that Boston Scientific has awarded The Neuromodulation Foundation, Inc., a grant to support our work updating and maintaining our two websites: WIKISTIM.org and neurmodfound.org, which presents *The Practice Parameters for the Use of Spinal Cord Stimulation in the Treatment of Chronic Neuropathic Pain*. We appreciate the continued support of the neuromodulation community as we develop these educational/research resources with the ultimate goal of improving patient care.

RECORD GROWTH IN MEMEBERSHIP SINCE THE APRIL NEWSLETTER

In the past month, we have had the largest one-month bump in WIKISTIM registration since we created the site. We are grateful to everyone who is helping us spread the word about WIKISTIM!

13th WORLD CONGRESS OF THE INTERNATIONAL NEUROMODULATION SOCIETY

Please join us on May 30th at [INS](#) in Edinburgh as we present our paper poster describing WIKISTIM's current status and upcoming features four times (7:30 to 8:00, 10:00 to 10:25, 13:30 to 14:30, and 16:00 to 16:30 and make an oral presentation in the Sidlaw Auditorium from 17:30 to 17:40.

The INS has also given us space for a tabletop exhibit in the Exhibition Hall. We are grateful for this support and encouragement as we all work to improve communication of study results, design of neurostimulation studies, and patient outcomes.

NEW ENTRIES

Even as we keep the WIKISTIM database up-to-date, we continue to expand our listing of DBS citations that report primary data in indications beyond Parkinson's Disease, depression, epilepsy, and OCT. We have identified hundreds of possibilities for dystonia and tremor and will be adding these as soon as we format them and check for duplicates. Next up will be Tourette's syndrome, anorexia, Alzheimer's disease, and addiction. The peripheral nerve stimulation section is also awaiting our focused attention. We continue to maintain our comprehensive citation listings for SCS, GES, SNS, and DRG.

DONATIONS

Please visit the [DONATE](#) link on the WIKISTIM homepage for information on tax-deductible donations! Our goal is to keep WIKISTIM available free of charge. And please consider including The

Neuromodulation Foundation, Inc. in your estate planning, as Dr. Richard North did this month!

MAY 2017 STATUS

- 473 subscribers
- DBS citations 3135
- DRG citations 49
- GES citations 476
- PNS citations 48
- SCS citations 2034
- SNS citations 829

CITATIONS OF NEW PAPERS THAT REPORT PRIMARY DATA ADDED MAY 2017

DBS (the WIKISTIM database is as comprehensive as possible for depression, epilepsy, OCD, and Parkinson's—we are in the process of adding other indications)

1. Amami P, Mascia MM, Franzini A, Saba F, Albanese A. Shifting from constant-voltage to constant-current in Parkinson's disease patients with chronic stimulation. *Neurol Sci* 2017 epub <https://www.ncbi.nlm.nih.gov/pubmed/28478496>
2. Blomstedt P, Naesström M, Bodlund O. Deep brain stimulation in the bed nucleus of the stria terminalis and medial forebrain bundle in a patient with major depressive disorder and anorexia nervosa. *Clin Case Rep* 2017 5(5):679-684 <https://www.ncbi.nlm.nih.gov/pubmed/28469875>
3. Bočková M, Chládek J, Jurák P, Halámek J, Rapcsak SZ, Baláž M, Chrastina J, Rektor I. Oscillatory reactivity to effortful cognitive processing in the subthalamic nucleus and internal pallidum: a depth electrode EEG study. *J Neural Transm (Vienna)* 2017 epub <https://www.ncbi.nlm.nih.gov/pubmed/28389718>
4. Choudhury TK, Davidson JE, Viswanathan A, Strutt AM. Deep brain stimulation of the anterior limb of the internal capsule for treatment of therapy-refractory obsessive compulsive disorder (OCD): a case study highlighting neurocognitive and psychiatric changes. *Neurocase* 2017 epub 1-8 <https://www.ncbi.nlm.nih.gov/pubmed/28457185>
5. Cole SR, van der Meij R, Peterson EJ, de Hemptinne C, Starr PA, Voytek B. Nonsinusoidal beta oscillations reflect cortical pathophysiology in Parkinson's disease. *J Neurosci* 2017 37(18):4830-4840 <https://www.ncbi.nlm.nih.gov/pubmed/28416595>
6. de Haan S, Rietveld E, Stokhof M, Denys D. Becoming more oneself? Changes in personality following DBS treatment for psychiatric disorders: experiences of OCD patients and general considerations. *PLoS One* 2017 12(4):e0175748 <https://www.ncbi.nlm.nih.gov/pubmed/28426824>
7. Delrobaei M, Baktash N, Gilmore G, Mclsaac K, Jog M. Using wearable technology to generate objective Parkinson's disease dyskinesia severity score: possibilities for home monitoring. *IEEE Trans Neural Syst Rehabil Eng* 2017 epub <https://www.ncbi.nlm.nih.gov/pubmed/28391201>
8. Dowd RS, Pourfar M, Mogilner AY. Deep brain stimulation for Tourette syndrome: a single-center series. *J Neurosurg* 2017 epub 1-9 <https://www.ncbi.nlm.nih.gov/pubmed/28387621>
9. Dufournet B, Nguyen K, Charles P, Grabli D, Jacqueline A, Borg M, Danaila T, Mutez E, Drapier S, Colin O, Eusebio A, Philip N, Azulay JP. Parkinson's disease associated with 22q11.2 deletion: clinical characteristics and response to treatment. *Rev Neurol (Paris)* 2017 epub <https://www.ncbi.nlm.nih.gov/pubmed/28461026>
10. Eddelman D, Wewel J, Wiet RM, Metman LV, Sani S. Deep brain stimulation with a pre-existing cochlear implant: surgical technique and outcome. *Surg Neurol Int* 2017 epub 8:47 <https://www.ncbi.nlm.nih.gov/pubmed/28480109>

11. Foley JA, Foltynie T, Zrinzo L, Hyam JA, Limousin P, Cipolotti L. Apathy and reduced speed of processing underlie decline in verbal fluency following DBS. *Behav Neurol* 2017 epub <https://www.ncbi.nlm.nih.gov/pubmed/28408788>
12. Gunalan K, Chaturvedi A, Howell B, Duchin Y, Lempka SF, Patriat R, Sapiro G, Harel N, McIntyre CC. Creating and parameterizing patient-specific deep brain stimulation pathway-activation models using the hyperdirect pathway as an example. *PLoS One* 2017 12(4):e0176132 <https://www.ncbi.nlm.nih.gov/pubmed/28441410>
13. Horn A, Neumann WJ, Degen K, Schneider GH, Kühn AA. Toward an electrophysiological 'sweet spot' for deep brain stimulation in the subthalamic nucleus. *Hum Brain Mapp* 2017 epub <https://www.ncbi.nlm.nih.gov/pubmed/28390148>
14. Juhász A, Deli G, Aschermann Z, Janszky J, Harmat M, Makkos A, Kovács M, Komoly S, Balás I, Dóczi T, Büki A, Kovács N. How efficient is subthalamic deep brain stimulation in reducing dyskinesia in Parkinson's disease? *Eur Neurol* 2017 77(5-6):281-287 <https://www.ncbi.nlm.nih.gov/pubmed/28391276>
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20. Musacchio T, Rebenstorff M, Fluri F, Brotchie JM, Volkmann J, Koprach JB, Ip CW. STN-DBS is neuroprotective in the A53T α -synuclein Parkinson's disease rat model. *Ann Neurol* 2017 epub <https://www.ncbi.nlm.nih.gov/pubmed/28470693>
21. Ooms P, Blankers M, Figeo M, Bergfeld IO, van den Munckhof P, Schuurman PR, Denys D. Cost-effectiveness of deep brain stimulation versus treatment as usual for obsessive-compulsive disorder. *Brain Stimul* 2017 epub <https://www.ncbi.nlm.nih.gov/pubmed/28457837>
22. Patel AS. Deep brain stimulation target selection in an advanced Parkinson's disease patient with significant tremor and comorbid depression. *Tremor Other Hyperkinet Mov (N Y)* 2017 epub 7:447 <https://www.ncbi.nlm.nih.gov/pubmed/28428905>
23. Patterson A, Okun MS, Hess C. High-voltage VIM region deep brain stimulation mimicking progressive supranuclear palsy. *Tremor Other Hyperkinet Mov (N Y)* 2017 epub 7:449 <https://www.ncbi.nlm.nih.gov/pubmed/28373925>
24. Pérez-Suárez J, Torres Díaz CV, López Manzanares L, Navas García M, Pastor J, Barrio Fernández P, G de Sola R. Radiofrequency lesions through deep brain stimulation electrodes in movement disorders: case report and review of the literature. *Stereotact Funct Neurosurg* 2017 95(3):137-141 <https://www.ncbi.nlm.nih.gov/pubmed/28433987>
25. Regidor I, Benita V, Del Álamo de Pedro M, Ley L, Martínez Castrillo JC. Duodenal levodopa infusion for long-term deep brain stimulation-refractory symptoms in advanced Parkinson disease. *Clin Neuropharmacol* 2017 epub <https://www.ncbi.nlm.nih.gov/pubmed/28452905>

26. Ryu HS, Kim MS, You S, Kim MJ, Kim YJ, Kim J, Kim K, Chung SJ. Comparison of pallidal and subthalamic deep brain stimulation in Parkinson's disease: therapeutic and adverse effects. *J Mov Disord* 2017 epub <https://www.ncbi.nlm.nih.gov/pubmed/28479586>
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35. Zhu Y, Wang J, Li H, Deng B, Liu C. Modulation of Parkinsonian state with uncertain disturbance based on sliding mode control. *IEEE Trans Neural Syst Rehabil Eng* 2017 epub <https://www.ncbi.nlm.nih.gov/pubmed/28475061>

DRG (updating our comprehensive list)

1. Goebel A, Lewis S, Phillip R, Sharma M. Dorsal root ganglion stimulation for complex regional pain syndrome (CRPS) recurrence after amputation for CRPS, and failure of conventional spinal cord stimulation. *Pain Pract* 2017 epub <https://www.ncbi.nlm.nih.gov/pubmed/28422399>
2. Huygen F, Liem L, Cusack W, Kramer J. Stimulation of the L2-L3 dorsal root ganglia induces effective pain relief in the low back. *Pain Pract* 2017 epub <https://www.ncbi.nlm.nih.gov/pubmed/28486758>

GES (updating our comprehensive list)

1. Heckert J, Thomas RM, Parkman HP. Gastric neuromuscular histology in patients with refractory gastroparesis: relationships to etiology, gastric emptying, and response to gastric electric stimulation. *Neurogastroenterol Motil* 2017 epub <https://www.ncbi.nlm.nih.gov/pubmed/28374487>

2. Klinge MW, Rask P, Mortensen LS, Lassen K, Ejskjaer N, Ehlers LH, Krogh K. Early assessment of cost-effectiveness of gastric electrical stimulation for diabetic nausea and vomiting. *J Neurogastroenterol Motil* 2017 epub <https://www.ncbi.nlm.nih.gov/pubmed/28478663>
3. Li S, Zhu W, Zhang S, Chen JD. Chronic intestinal electrical stimulation improves glucose intolerance and insulin resistance in diet-induced obesity rats. *Obesity (Silver Spring)* 2017 epub <https://www.ncbi.nlm.nih.gov/pubmed/28437585>

SCS (updating our comprehensive list)

1. Dai Z, Huang C, Zhao Q, Zhang S, Zhao H, Zhang Y, Qian Y, Tang Y. Effects of extrinsic cardiac nerve stimulation on atrial fibrillation inducibility: the regulatory role of the spinal cord. *J Cardiovasc Electrophysiol* 2017 epub <https://www.ncbi.nlm.nih.gov/pubmed/28422349>
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3. Harandi S, Kapural L. Four extremity neurostimulation using two cervical octapolar leads and high-frequency of 10-kHz. *Pain Pract* 2017 epub <https://www.ncbi.nlm.nih.gov/pubmed/28419784>
4. Hoelscher C, Riley J, Wu C, Sharan A. Cost-effectiveness data regarding spinal cord stimulation for low back pain. *Spine* 2017 epub <https://www.ncbi.nlm.nih.gov/pubmed/28399549>
5. Inoue S, Johaneck LM, Sluka KA. Lack of analgesic synergy of the cholecystokinin receptor antagonist proglumide and spinal cord stimulation for the treatment of neuropathic pain in rats. *Neuromodulation* 2017 epub <https://www.ncbi.nlm.nih.gov/pubmed/28393429>
6. Özdemir İ, Akbaş M, Yeğin A, Dağistan G, Erkan DÖ. Spinal cord stimulation in 62 patients: retrospective evaluation. *Turkish. Agri* 2017 29(1):25-32 <https://www.ncbi.nlm.nih.gov/pubmed/28467566>
7. Remacle TY, Bonhomme VL, Renwart HP, Remacle JM. Effect of multicolumn lead spinal cord stimulation on low back pain in failed back surgery patients: a three-year follow-up. *Neuromodulation* 2017 epub <https://www.ncbi.nlm.nih.gov/pubmed/28464357>
8. Taverner MG, Monagle JP. Three-dimensional printing: an aid to epidural access for neuromodulation. *Neuromodulation* 2017 epub <https://www.ncbi.nlm.nih.gov/pubmed/28425137>

SNS (updating our comprehensive list)

1. D'Hondt M, Nuytens F, Kinget L, Decaestecker M, Borgers B, Parmentier I. Sacral neurostimulation for low anterior resection syndrome after radical resection for rectal cancer: evaluation of treatment with the LARS score. *Tech Coloproctol* 2017 epub <https://www.ncbi.nlm.nih.gov/pubmed/28451766>
2. Eftaiha SM, Balachandran B, Marecik SJ, Mellgren A, Nordenstam J, Melich G, Prasad LM, Park JJ. Sacral nerve stimulation can be an effective treatment for low anterior resection syndrome. *Colorectal Dis* 2017 epub <https://www.ncbi.nlm.nih.gov/pubmed/28477435>
3. Jairam R, Drossaerts J, van Koeveeringe G, van Kerrebroeck P. The impact of duration of complaints on successful outcome of sacral neuromodulation. *Urol Int* 2017 epub <https://www.ncbi.nlm.nih.gov/pubmed/28478446>
4. Li X, Liao L, Chen G, Wang Z, Deng H. Combination of sacral nerve and tibial nerve stimulation for treatment of bladder overactivity in pigs. *Int Urol Nephrol* 2017 epub <https://www.ncbi.nlm.nih.gov/pubmed/8421392>

5. Maeda Y, Kamm MA, Vaizey CJ, Matzel KE, Johansson C, Rosen H, Baeten CG, Laurberg S. Long-term outcome of sacral neuromodulation for chronic refractory constipation. Tech Coloproctol 2017 epub <https://www.ncbi.nlm.nih.gov/pubmed/28429130>
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FINANCIAL SUPPORT TO DATE FOR 2016/17

- Boston Scientific
- B. Todd Sitzman, MD, MPH
- NEURO
- Richard B. North, MD
- The NANS Foundation, now the Institute of Neuromodulation
- Thomas Abell, MD

Ongoing in-kind support:

- The International Neuromodulation Society (publicity and conference registration)
- The Neuromodulation Foundation (parent non-profit, overhead and development)
- The North American Neuromodulation Society (publicity and conference registration)

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Disclosure

WIKISTIM includes citations for indications that are or might be considered off-label in the United States.

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