April 2017 News **PLEASE FORWARD TO YOUR COLLEAGUES** **www.wikistim.org**

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13th WORLD CONGRESS OF THE INTERNATIONAL NEUROMODULATION SOCIETY

May 30th will be WIKISTIM day at INS in Edinburgh! Obviously, we are not entirely serious, but on this day, we will 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). We will also 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.

DBS ENTRIES ON PD CAUGHT UP

Each month we have been adding new DBS citations and catching up PUBMED listings for Parkinson's Disease, working back year by year to the earliest papers. We have completed this on PUBMED, so that all of the primary research report appear on WIKISTIM . At this point, we will rely on our subscribers and section editors to alert us to any papers that we might have missed, for example, because they are not listed on PUBMED. We will, of course, continue to add new citations each month.

Of course, DBS is used to treat other indications, and we believe our list is comprehensive for three of these: OCD, otherwise refractory depression, and epilepsy. We plan to add citations for the rest of the indications, such as Tourette's syndrome, essential tremor, anorexia, Alzheimer's disease, and addiction.

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!

April 2017 Status

- 459 subscribers
- DBS citations 3100
- DRG citations 47
- GES citations 473
- PNS citations 48

- SCS citations 2026
- SNS citations 823

CITATIONS OF NEW PAPERS THAT REPORT PRIMARY DATA ADDED APRIL 2017

DBS Depression (adding to our comprehensive list)

1. Dandekar MP, Luse D, Hoffmann C, Cotton P, Peery T, Ruiz C, Hussey C, Giridharan VV, Soares JC, Quevedo J, Fenoy AJ. Increased dopamine receptor expression and anti-depressant response following deep brain stimulation of the medial forebrain bundle. J Affect Disord 2017 217:80-88 https://www.ncbi.nlm.nih.gov/pubmed/28395208
2. Flores Alves Dos Santos J, Tezenas du Montcel S, Gargiulo M, Behar C, Montel S, Hergueta T, Navarro S, Belaid H, Cloitre P, Karachi C, Mallet L, Welter ML. Tackling psychosocial maladjustment in Parkinson's disease patients following subthalamic deep-brain stimulation: a randomised clinical trial. PLoS One 2017 12(4):e0174512 https://www.ncbi.nlm.nih.gov/pubmed/28399152
3. Riva-Posse P, Choi KS, Holtzheimer PE, Crowell AL, Garlow SJ, Rajendra JK, McIntyre CC, Gross RE, Mayberg HS. A connectomic approach for subcallosal cingulate deep brain stimulation surgery: prospective targeting in treatment-resistant depression. Mol Psychiatry 2017 epub https://www.ncbi.nlm.nih.gov/pubmed/28397839
4. Schippers MC, Bruinsma B, Gaastra M, Mesman TI, Denys D, De Vries TJ, Pattij T. Deep brain stimulation of the nucleus accumbens core affects trait impulsivity in a baseline-dependent manner. Front Behav Neurosci 2017 epub 11:52https://www.ncbi.nlm.nih.gov/pubmed/28386221
5. Settell ML, Testini P, Cho S, Lee JH, Blaha CD, Jo HJ, Lee KH, Min HK. Functional circuitry effect of ventral tegmental area deep brain stimulation: imaging and neurochemical evidence of mesocortical and mesolimbic pathway modulation. Front Neurosci 2017 epub 11:104 https://www.ncbi.nlm.nih.gov/pubmed/28316564

DBS OCD (adding to our comprehensive list)

1. Dandekar MP, Luse D, Hoffmann C, Cotton P, Peery T, Ruiz C, Hussey C, Giridharan VV, Soares JC, Quevedo J, Fenoy AJ. Increased dopamine receptor expression and anti-depressant response following deep brain stimulation of the medial forebrain bundle. J Affect Disord 2017 217:80-88 https://www.ncbi.nlm.nih.gov/pubmed/28395208
2. Schippers MC, Bruinsma B, Gaastra M, Mesman TI, Denys D, De Vries TJ, Pattij T. Deep brain stimulation of the nucleus accumbens core affects trait impulsivity in a baseline-dependent manner. Front Behav Neurosci 2017 epub 11:52https://www.ncbi.nlm.nih.gov/pubmed/28386221

DBS PD & Miscellaneous (we only list recent publications here even though we continue to add older citations to the database)

1. Antosik-Wójcińska A, Święcicki Ł, Dominiak M, Sołtan E, Bieńkowski P, Mandat T. Impact of STN-DBS on mood, drive, anhedonia and risk of psychiatric side-effects in the population of PD patients. J Neurol Sci 2017 375:342-347 https://www.ncbi.nlm.nih.gov/pubmed/28320164
2. Arocho-Quinones EV, Hammer MJ, Bock JM, Pahapill PA. Effects of deep brain stimulation on vocal fold immobility in Parkinson's disease. Surg Neurol Int 2017 epub 8:22 https://www.ncbi.nlm.nih.gov/pubmed/28303202
3. Baumann-Vogel H, Imbach LL, Sürücü O, Stieglitz L, Waldvogel D, Baumann CR, Werth E. The impact of subthalamic deep brain stimulation on sleep-wake behavior: a prospective

electrophysiological study in 50 Parkinson patients. Sleep 2017 epub https://www.ncbi.nlm.nih.gov/pubmed/28369624
4. Demeter G, Valálik I, Pajkossy P, Szőllősi Á, Lukács Á, Kemény F, Racsmány M. The effect of deep brain stimulation of the subthalamic nucleus on executive functions: impaired verbal fluency and intact updating, planning and conflict resolution in Parkinson's disease. Neurosci Lett 2017 647:72-77 https://www.ncbi.nlm.nih.gov/pubmed/28323092
5. Jha A, Litvak V, Taulu S, Thevathasan W, Hyam JA, Foltynie T, Limousin P, Bogdanovic M, Zrinzo L, Green AL, Aziz TZ, Friston K, Brown P. Functional connectivity of the pedunculopontine nucleus and surrounding region in Parkinson's disease. Cereb Cortex 2017 27(1):54-67 https://www.ncbi.nlm.nih.gov/pubmed/28316456
6. Ramayya AG, Abdullah KG, Mallela AN, Pierce JT, Thawani J, Petrov D, Baltuch GH. Thirty-day readmission rates following deep brain stimulation surgery. Neurosurgery 2017 epub https://www.ncbi.nlm.nih.gov/pubmed/28327899
7. Rouhollahi K, Emadi Andani M, Karbassi SM, Izadi I. Design of robust adaptive controller and feedback error learning for rehabilitation in Parkinson's disease: a simulation study. IET Syst Biol 2017 11(1):19-29 https://www.ncbi.nlm.nih.gov/pubmed/28303790
8. Steel DA, Basu S. Does trajectory matter? A study looking into the relationship of trajectory with target engagement and error accommodation in subthalamic nucleus deep brain stimulation. Acta Neurochir (Wien) 2017 epub https://www.ncbi.nlm.nih.gov/pubmed/28361249
9. Wang CF, Yang SH, Lin SH, Chen PC, Lo YC, Pan HC, Lai HY, Liao LD, Lin HC, Chen HY, Huang WC, Huang WJ, Chen YY. A proof-of-principle simulation for closed-loop control based on preexisting experimental thalamic DBS-enhanced instrumental learning. Brain Stimul 2017 epub https://www.ncbi.nlm.nih.gov/pubmed/28298263
10. Weegink KJ, Bellette PA, Varghese JJ, Silburn PA, Meehan PA, Bradley AP. A parametric simulation of neuronal noise from microelectrode recordings. IEEE Trans Neural Syst Rehabil Eng 2017 25(1):1-10 https://www.ncbi.nlm.nih.gov/pubmed/27254870
11. Yan H, Wang J. Quantification of motor network dynamics in Parkinson's disease by means of landscape and flux theory. PLoS One 2017 12(3):e0174364 https://www.ncbi.nlm.nih.gov/pubmed/28350890
12. Zaaroor M, Sinai A, Goldsher D, Eran A, Nassar M, Schlesinger I. Magnetic resonance-guided focused ultrasound thalamotomy for tremor: a report of 30 Parkinson's disease and essential tremor cases. J Neurosurg 2017 epub 1-9 https://www.ncbi.nlm.nih.gov/pubmed/28298022

SCS (updating our comprehensive list)

1. Brys I, Nunes J, Fuentes R. Motor deficits and beta-oscillations are dissociable in an alpha-synuclein model of Parkinson's disease. Eur J Neurosci 2017 epub https://www.ncbi.nlm.nih.gov/pubmed/28370471
2. Collison C, Prusik J, Paniccioli S, Briotte M, Grey R, Feustel P, Pilitsis JG. Prospective study of the use of intraoperative neuromonitoring in determining post-operative energy requirements and physiologic midline in spinal cord stimulation. Neuromodulation 2017 epub https://www.ncbi.nlm.nih.gov/pubmed/28370852
3. Elsamadicy AA, Farber SH, Yang S, Hussaini SM, Murphy KR, Sergesketter A, Suryadevara CM, Pagadala P, Parente B, Xie J, Lad SP. Impact of insurance provider on overall costs in failed back surgery syndrome: a cost study of 122,827 patients. Neuromodulation 2017 epub https://www.ncbi.nlm.nih.gov/pubmed/28322477
4. Helmond NV, Kardaszewski CN, Chapman KB. Cervical retrograde spinal cord stimulation lead placement to treat failed back surgery syndrome: a case report. A A Case Rep 2017 epub https://www.ncbi.nlm.nih.gov/pubmed/28328589

5. Hussaini SM, Murphy KR, Han JL, Elsamadicy AA, Yang S, Premji A, Parente B, Xie J, Pagadala P, Lad SP. Specialty-based variations in spinal cord stimulation success rates for treatment of chronic pain. Neuromodulation 2017 epub https://www.ncbi.nlm.nih.gov/pubmed/28370989
6. Kubota T, Ishikawa Y, Ishikawa R. Spinal cord stimulation treatment for persistent pain after a burn injury: a case report. A A Case Rep 2017 epub https://www.ncbi.nlm.nih.gov/pubmed/28306581
7. Steinbach K, Bettstetter H, Link C. High-frequency spinal cord stimulation at 10 kHz for the treatment of chronic neuropathic pain after a II-III degree burn. Pain Med 2017 epub https://www.ncbi.nlm.nih.gov/pubmed/28371858
8. Taghva A, Karst E, Underwood P. Clinical paresthesia atlas illustrates likelihood of coverage based on spinal cord stimulator electrode location. Neuromodulation 2017 epub https://www.ncbi.nlm.nih.gov/pubmed/28370724

SNS (updating our comprehensive list)

1. Hennessey DB, Hoag N, Gani J. Sacral neuromodulation for detrusor hyperactivity with impaired contractility. Neurourol Urodyn 2017 epub https://www.ncbi.nlm.nih.gov/pubmed/28345779
2. Irwin GW, Dasari BV, Irwin R, Johnston D, Khosraviani K. Outcomes of sacral nerve stimulation for faecal incontinence in Northern Ireland. Ulster Med J 2017 86(1):20-24 https://www.ncbi.nlm.nih.gov/pubmed/28298708
3. Lagares-Tena L, Corbella-Sala C, Navarro-Luna A, Muñoz-Duyos A. Sacral neuromodulation in a faecal incontinence patient with unknown sacral partial agenesis. Colorectal Dis 2017 epub https://www.ncbi.nlm.nih.gov/pubmed/28319341
4. Lavonius M, Suvitie P, Varpe P, Huhtinen H. Sacral neuromodulation: foray into chronic pelvic pain in end stage endometriosis. Case Rep Neurol Med 2017 2017:2197831 https://www.ncbi.nlm.nih.gov/pubmed/28367344
5. Suarez-Fuster L, Alexander B, Renaud R, Shaw C, Baranchuk A. Electrocardiographic interference by a sacral neuromodulation device. J Electrocardiol 2017 epub https://www.ncbi.nlm.nih.gov/pubmed/28347480

FINANCIAL SUPPORT TO DATE FOR 2016/17

- B. Todd Sitzman, MD, MPH
- NEVRO
- 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)

Elliot Krames, MD, Dorsal Root Ganglion Stimulation
Bengt Linderoth, MD, PhD, Experimental Studies
Richard B. North, MD, Spinal Cord Stimulation
B. Todd Sitzman, MD, MPH, At Large
Konstantin Slavin, MD, Deep Brain Stimulation
Kristl Vonck, MD, PhD, Section on DBS for Epilepsy
Richard Weiner, MD, Peripheral Nerve Stimulation
Jonathan Young, MD, Noninvasive Brain Stimulation
To be determined, Vagus Nerve Stimulation

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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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