



October 2019 News

PLEASE FORWARD TO YOUR COLLEAGUES

www.wikistim.org

If you are encountering this newsletter for the first time, please visit WIKISTIM's [ABOUT](#) section, which describes the site's unique resources and is accessible without registration.

The NAPA conference is happening this week!

[Neuromodulation: The Science & NYC Neuromodulation](#), October 4-6, 2019, Napa, California. Dr. North will be presenting the WIKISTIM update abstract and manning the WIKISTIM tabletop exhibit. He will be happy to meet any of our subscribers either at this or any other meeting, so don't be shy!

OCTOBER 2019 STATISTICS

Want to increase exposure to a scientific paper that reports primary data? Download and complete its WIKISTIM datasheet and email the result to wikistim@gmail.com. Articles that we list with newly completed datasheets receive more clicks than any other citation on WIKISTIM. Watch for a new submission from NEVRO next month!

Most clicked PUBMED links during the past month from previous newsletters

1. Atchley TJ, Laskay NMB, Sherrod BA, Rahman AKMF, Walker HC, Guthrie BL. Reoperation for device infection and erosion following deep brain stimulation implantable pulse generator placement. *J Neurosurg* 2019 epub:1-8 <https://www.ncbi.nlm.nih.gov/pubmed/31174189>
2. Ahrweiller K, Houvenaghel JF, Riou A, Drapier S, Sauleau P, Haegelen C, Jannin P, Vérin M, Palard X, Le Jeune F. Postural instability and gait disorders after subthalamic nucleus deep brain stimulation in Parkinson's disease: a PET study. *J Neurol* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31350641>
3. Al-Fatly B, Ewert S, Kübler D, Kroneberg D, Horn A, Kühn AA. Connectivity profile of thalamic deep brain stimulation to effectively treat essential tremor. *Brain* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31377766>
4. Anderson DJ, Kipke DR, Nagel SJ, Lempka SF, Machado AG, Holland MT, Gillies GT, Howard MA 3rd, Wilson S. Intradural spinal cord stimulation: performance modeling of a new modality. *Front Neurosci* 2019 epub 13:253 <https://www.ncbi.nlm.nih.gov/pubmed/30941012>
5. Bot M, Verhagen O, Caan M, Potters WV, Dilai Y, Odekerken VJJ, Dijk JM, de Bie RMA, Schuurman PR, van den Munckhof P. Defining the dorsal STN border using 7.0-T MRI: a comparison to microelectrode recordings and lower field strength MRI. *Stereotact Funct Neurosurg* 2019 epub:1-7 <https://www.ncbi.nlm.nih.gov/pubmed/31430753>

- Alpaugh M, Saint-Pierre M, Dubois M, Aubé B, Arsenault D, Kriz J, Cicchetti A, Cicchetti F. A novel wireless brain stimulation device for long-term use in freely moving mice. *Sci Rep* 2019 9(1):6444 <https://www.ncbi.nlm.nih.gov/pubmed/31015544>
- Cao L, Li J, Zhou Y, Liu Y, Zhao Y, Liu H. Online identification of functional regions in DBS based on unsupervised random forest with feature selection. *J Neural Eng* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31266003>

Membership

In September, the number of our subscribers grew to 1087. Thank you for helping to spread the word!

Number of citations in each section

- DBS 5113, with 2 completed WIKISTIM abstracts
- DRG 111, with 9 completed WIKISTIM abstracts
- GES 487
- PNS 57 (limited to peripheral nerve field stimulation)
- SCS 2379, with 131 completed or partially completed WIKISTIM abstracts
- SNS 963

SUPPORT FOR WIKISTIM

The Neuromodulation Foundation is a non-profit charitable corporation with a paid staff of one person and almost no overhead costs. The Foundation supports WIKISTIM by seeking grants and donations and with income earned through appropriate consulting work. Please consider making a donation via PAYPAL using this [DONATE](#) link or by sending a check to The Neuromodulation Foundation, 117 East 25th Street, Baltimore, MD 21218. Please encourage institutional and corporate sponsors as well. We'd love to add your name and theirs to our list of financial supporters below!

Individual supporters in 2018-19

- Thomas Abell, MD
- Richard B. North, MD
- B. Todd Sitzman, MD, MPH

Industry support 2018-19

- Boston Scientific
- Medtronic
- Nevro
- Nuvectra

Nonprofit support

- The International Neuromodulation Society (publicity and conference registration)
- The Neuromodulation Foundation, Inc. (WIKISTIM's parent organization)
- The North American Neuromodulation Society (publicity, conference registration, grant)

CITATIONS ADDED FROM SEARCH ON SEPTEMBER 23, 2019

DBS

- Aquino CC, Duffley G, Hedges DM, Vorwerk J, House PA, Ferraz HB, Rolston JD, Butson CR, Schrock LE. Interleaved deep brain stimulation for dyskinesia management in Parkinson's disease. *Mov Disord* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31483534>

2. Baldermann JC, Bohn KP, Hammes J, Schüller CB, Visser-Vandewalle V, Drzezga A, Kuhn J. Local and global changes in brain metabolism during deep brain stimulation for obsessive-compulsive disorder. *Brain Sci* 2019 epub 9(9) <https://www.ncbi.nlm.nih.gov/pubmed/31480355>
3. Bick SK, Patel SR, Katnani HA, Peled N, Cash SS, Eskandar EN. Caudate stimulation enhances learning. *Brain* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31504220>
4. Casagrande SCB, Listik C, Coelho DB, Limongi JCP, Teixeira LA, Teixeira MJ, Barbosa ER, Cury RG. Deep brain stimulation in patients with isolated generalized dystonia caused by PRKRA mutation. *Mov Disord Clin Pract* 2019 6(7):616-618 <https://www.ncbi.nlm.nih.gov/pubmed/31538099>
5. Castano-Candamil S, Piroth T, Reinacher P, Sajonz B, Coenen VA, Tangermann M. An easy-to-use and fast assessment of patient-specific DBS-induced changes in hand motor control in Parkinson's Disease. *IEEE Trans Neural Syst Rehabil Eng* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31536010>
6. Chen J, Chen X, Lv S, Zhang Y, Long H, Yang K, Qi S, Zhang W, Wang J. Application of 3D printing in the construction of burr hole ring for deep brain stimulation implants. *J Vis Exp* 2019 epub (151) <https://www.ncbi.nlm.nih.gov/pubmed/31545320>
7. Choi JH, Kim HJ, Lee JY, Yoo D, Im JH, Paek SH, Jeon B. Long-term effects of bilateral subthalamic nucleus stimulation on sleep in patients with Parkinson's disease. *PLOS One* 2019 14(8):e0221219 <https://www.ncbi.nlm.nih.gov/pubmed/31454366>
8. Dang TTH, Rowell D, Liddle J, Coyne T, Silburn P, Connelly LB. Economic evaluation of deep-brain stimulation for Tourette's syndrome: an initial exploration. *J Neurol* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31485722>
9. Dembek TA, Hoevels M, Hellerbach A, Horn A, Petry-Schmelzer JN, Borggreffe J, Wirths J, Dafsari HS, Barbe MT, Visser-Vandewalle V, Treuer H. Directional DBS leads show large deviations from their intended implantation orientation. *Parkinsonism Relat Disord* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31495733>
10. Elkouzi A, Ramirez-Zamora A, Zeilman P, Barabas M, Eisinger RS, Malaty IA, Okun MS, Almeida L. Rescue levodopa-carbidopa intestinal gel (LCIG) therapy in Parkinson's disease patients with suboptimal response to deep brain stimulation. *Ann Clin Transl Neurol* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31518070>
11. Fana M, Everett G, Fagan T, Mazzella M, Zahedi S, Clements JM. Procedural outcomes of deep brain stimulation (DBS) surgery in rural and urban patient population settings. *J Clin Neurosci* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31492482>
12. Ganapa SV, Ramani MD, Eburnlomo OO, Rahman RK, Herschman Y, Mammis A. Case report and literature review of treatment of persistent hemiballism with deep brain stimulation of the globus pallidus internus (GPi-DBS). *World Neurosurg* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31541757>
13. Goelz LC, Cottongim M, Metman LV, Corcos DM, David FJ. Bilateral subthalamic nucleus deep brain stimulation increases fixational saccades during movement preparation: evidence for impaired preparatory set. *Exp Brain Res* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31455999>
14. Habibi SAH, Shahidi G, Parvaresh M, Fasano A, Pouranian M, Yazdi N, Modara F, Mehdizadeh M, Taghizadeh G, Rohani M. Cerebral peri-lead edema following deep brain stimulation surgery. *Neurol Sci* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31468236>
15. Hanssen H, Steinhardt J, Münchau A, Al-Zubaidi A, Tzvi E, Heldmann M, Schramm P, Neumann A, Rasche D, Saryyeva A, Voges J, Galazky I, Büntjen L, Heinze HJ, Krauss JK, Tronnier V, Münte TF, Brüggemann N. Cerebello-striatal interaction mediates effects of subthalamic nucleus deep brain stimulation in Parkinson's disease. *Parkinsonism Relat Disord* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31494048>

16. Holanda VM, Okun MS, Middlebrooks EH, Gungor A, Barry ME, Forder J, Foote KD. Postmortem dissections of common targets for lesion and deep brain stimulation surgeries. *Neurosurgery* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31504849>
17. Hong B, Winkel A, Stumpp N, Abdallat M, Saryyeva A, Runge J, Stiesch M, Krauss JK. Detection of bacterial DNA on neurostimulation systems in patients without overt infection. *Clin Neurol Neurosurg* 2019 184:105399 <https://www.ncbi.nlm.nih.gov/pubmed/31302380>
18. Hyam JA, Roy HA, Huang Y, Martin S, Wang S, Rippey J, Coyne TJ, Stewart I, Kerr G, Silburn P, Paterson DJ, Aziz TZ, Green AL. Cardiovascular autonomic responses in patients with Parkinson disease to pedunculo-pontine deep brain stimulation. *Clin Auton Res* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31493114>
19. Imbach LL, Baumann CR, Poryazova R, Geissler O, Brugger P, Sarnthein J, Mothersill I, Weller M, Oertel MF, Stieglitz LH. Anticonvulsive effect of anterior thalamic deep brain stimulation in super-refractory status epilepticus crucially depends on active stimulation zone—a single case observation. *Seizure* 2019 71:286-288 <https://www.ncbi.nlm.nih.gov/pubmed/31493681>
20. Jansen N, Glaas M, Volpert S, Sloty P, Vesper J, Klenzner T. Cochlear implantation with deep brain or occipital nerve stimulation: case studies for parallel application. *German. HNO* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31471630>
21. Lee JJ, Daniels B, Austerman RJ, Dalm BD. Symptomatic, left-sided deep brain stimulation lead edema 6 h after bilateral subthalamic nucleus lead placement. *Surg Neurol Int* 2019 epub 10:68 <https://www.ncbi.nlm.nih.gov/pubmed/31528406>
22. Low HL, Ismail MNBM, Taqvi A, Deeb J, Fuller C, Misbahuddin A. Comparison of posterior subthalamic area deep brain stimulation for tremor using conventional landmarks versus directly targeting the dentatorubrothalamic tract with tractography. *Clin Neurol Neurosurg* 2019 185:105466 <https://www.ncbi.nlm.nih.gov/pubmed/31466022>
23. Mossner JM, Patil PG, Chou KL. Subthalamic nucleus deep brain stimulation improves dyskinesias in Parkinson's disease beyond levodopa reduction. *J Neural Transm (Vienna)* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31494731>
24. Mostofi A, Evans JM, Partington-Smith L, Yu K, Chen C, Silverdale MA. Outcomes from deep brain stimulation targeting subthalamic nucleus and caudal zona incerta for Parkinson's disease. *NPJ Parkinsons Dis* 2019 epub 5:17 <https://www.ncbi.nlm.nih.gov/pubmed/31453317>
25. Nijhuis FAP, van den Heuvel L, Bloem BR, Post B, Meinders MJ. The patient's perspective on shared decision-making in advanced Parkinson's disease: a cross-sectional survey study. *Front Neurol* 2019 epub 10:896 <https://www.ncbi.nlm.nih.gov/pubmed/31474936>
26. Paff M, Wang AS, Phielipp N, Vadera S, Morenkova A, Hermanowicz N, Hsu FPK. Two-year clinical outcomes associated with robotic-assisted subthalamic lead implantation in patients with Parkinson's disease. *J Robot Surg* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31520275>
27. Park HR, Choi SJ, Joo EY, Seo DW, Hong SB, Lee JI, Hong SC, Lee S, Shon YM. The role of anterior thalamic deep brain stimulation as an alternative therapy in patients with previously failed vagus nerve stimulation for refractory epilepsy. *Stereotact Funct Neurosurg* 2019 epub 1-7 <https://www.ncbi.nlm.nih.gov/pubmed/31533117>
28. Pozzi NG, Canessa A, Palmisano C, Brumberg J, Steigerwald F, Reich MM, Minafra B, Pacchetti C, Pezzoli G, Volkman J, Isaias IU. Freezing of gait in Parkinson's disease reflects a sudden derangement of locomotor network dynamics. *Brain* 2019 142(7):2037-2050 <https://www.ncbi.nlm.nih.gov/pubmed/31505548>
29. Rajagopalan SS, Miller AM, de Hemptinne C, San Luciano M, Ostrem JL, Starr PA. Washout of chronic therapeutic deep brain stimulation increases cortical phase-amplitude coupling. *Parkinsonism Relat Disord* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31477410>

30. Richard A, Hsu J, Baum P, Alterman R, Simon DK. Efficacy of deep brain stimulation in a patient with genetically confirmed chorea-acanthocytosis. *Case Rep Neurol* 2019 11(2):199-204 <https://www.ncbi.nlm.nih.gov/pubmed/31543803>
31. Sankar T, Chakravarty MM, Jawa N, Li SX, Giacobbe P, Kennedy SH, Rizvi SJ, Mayberg HS, Hamani C, Lozano AM. Neuroanatomical predictors of response to subcallosal cingulate deep brain stimulation for treatment-resistant depression. *J Psychiatry Neurosci* 2019 44(6):1-10 <https://www.ncbi.nlm.nih.gov/pubmed/31525860>
32. Santos BFO, Gorgulho A, Saraiva CWC, Lopes AC, Gomes JGR, Pássaro AM, Hoexter MQ, Miguel EC, De Salles AAF. Understanding gamma ventral capsulotomy: potential implications of diffusion tensor image tractography on target selectivity. *Surg Neurol Int* 2019 epub 10:136 <https://www.ncbi.nlm.nih.gov/pubmed/31528471>
33. Sato K, Aita N, Hokari Y, Kitahara E, Tani M, Izawa N, Hatori K, Nakamura R, Sasaki F, Sekimoto S, Jo T, Oyama G, Hatano T, Shimo Y, Iwamura H, Umemura A, Hattori N, Fujiwara T. Balance and gait improvements of postoperative rehabilitation in patients with Parkinson's disease treated with subthalamic nucleus deep brain stimulation (STN-DBS). *Parkinsons Dis* 2019 2019:7104071 <https://www.ncbi.nlm.nih.gov/pubmed/31467660>
34. Scelzo E, Beghi E, Rosa M, Angrisano S, Antonini A, Bagella C, Bianchi E, Caputo E, Lena F, Lopiano L, Marcante A, Marceglia S, Massaro F, Modugno N, Pacchetti C, Pilleri M, Pozzi NG, Romito LM, Santilli M, Tamma F, Weis L, Zibetti M, Priori A. Deep brain stimulation in Parkinson's disease: a multicentric, long-term, observational pilot study. *J Neurol Sci* 2019 epub 405:116411 <https://www.ncbi.nlm.nih.gov/pubmed/31476620>
35. Scheller U, Lofredi R, van Wijk BCM, Saryyeva A, Krauss JK, Schneider GH, Kroneberg D, Krause P, Neumann WJ, Kühn AA. Pallidal low-frequency activity in dystonia after cessation of long-term deep brain stimulation. *Mov Disord* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31483903>
36. Senova S, Mallet L, Gurruchaga JM, Rabu C, Derosin M, Yelnik J, Brugieres P, Pelissolo A, Palfi S, Domenech P. Severe obsessive-compulsive disorder secondary to neurodegeneration with brain iron accumulation: complete remission after subthalamic nuclei deep brain stimulation. *Biol Psychiatry* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31472980>
37. Svetel M, Tomić A, Dragašević N, Petrović I, Kresojević N, Jech R, Urgošik D, Banjac I, Vitković J, Novaković I, Kostić VS. Clinical course of patients with pantothenate kinase-associated neurodegeneration (PKAN) before and after DBS surgery. *J Neurol* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31463603>
38. Tanaka R, Ansari A, Kajita Y, Yamada Y, Kawase T, Kato Y. Staged deep brain stimulation of ventral intermediate nucleus of the thalamus for suppression of essential tremors. *Asian J Neurosurg* 2019 14(3):1030-1032 <https://www.ncbi.nlm.nih.gov/pubmed/31497158>
39. Torun NA, Senel GB, Gunduz A, Karadeniz D, Kiziltan G, Ertan S, Aydin S, Yagci S, Apaydin H. Sleep parameters associated with long-term outcome following subthalamic deep brain stimulation in Parkinson's disease. *Rev Neurol (Paris)* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31521396>
40. Vats A, Amit A, Doshi P. A comparative study of bilateral subthalamic nucleus DBS in Parkinson's disease in young versus old: a single institutional study. *J Clin Neurosci* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31481291>
41. Wagenbreth C, Kuehne M, Voges J, Heinze HJ, Galazky I, Zaehle T. Deep brain stimulation of the subthalamic nucleus selectively modulates emotion recognition of facial stimuli in Parkinson's patients. *J Clin Med* 2019 epub 8(9) <https://www.ncbi.nlm.nih.gov/pubmed/31466414>
42. Wang L, Shi H, Kang Y, Guofeng W. Hippocampal low-frequency stimulation improves cognitive function in pharmacoresistant epileptic rats. *Epilepsy Res* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31521425>

43. Xiao R, Malekmohammadi M, Pouratian N, Hu X. Characterization of pallidocortical motor network in Parkinson disease through complex network analysis. *J Neural Eng* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31505469>

DRG

1. Falowski SM, Conti KR, Mogilner AY. Analysis of S1 DRG programming to determine location of the DRG and ideal anatomic positioning of the electrode. *Neuromodulation* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31475769>
2. Kloosterman JR, Yang A, van Helmond N, Chapman KB. Dorsal root ganglion stimulation to treat persistent abdominal pain after bypass surgery. *Pain Med* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31504855>
3. Koetsier E, Franken G, Debets J, van Kuijk SMJ, Linderoth B, Joosten EA, Maino P. Dorsal root ganglion stimulation in experimental painful diabetic polyneuropathy: delayed wash-out of pain relief after low-frequency (1Hz) stimulation. *Neuromodulation* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31524325>
4. Levy RM, Mekhail N, Kramer J, Poree L, Amirdelfan K, Grigsby E, Staats P, Burton AW, Burgher AH, Scowcroft J, Golovac S, Kapural L, Paicius R, Pope J, Samuel S, McRoberts WP, Schaufele M, Kent AR, Raza A, Deer TR. Therapy habituation at 12 months: spinal cord stimulation versus dorsal root ganglion stimulation for complex regional pain syndrome type I and II. *J Pain* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31494275>
5. Parker T, Green A, Aziz T. Rapid onset and short washout periods of dorsal root ganglion stimulation facilitate multiphase crossover study designs. *Brain Stimul* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31519493>

GES

1. Zoll B, Jehangir A, Edwards MA, Petrov R, Hughes W, Malik Z, Parkman HP. Surgical treatment for refractory gastroparesis: stimulator, pyloric surgery, or both? *J Gastrointest Surg* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31512100>

PNS

No new papers reporting primary data this month.

SCS

1. Baird TA, Karas CS. The use of high-dose cervical spinal cord stimulation in the treatment of chronic upper extremity and neck pain. *Surg Neurol Int* 2019 epub 10:109 <https://www.ncbi.nlm.nih.gov/pubmed/31528447>
2. Goudman L, Linderoth B, Nagels G, Huysmans E, Moens M. Cortical mapping in conventional and high dose spinal cord stimulation: an exploratory power spectrum and functional connectivity analysis with electroencephalography. *Neuromodulation* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31453651>
3. Grider JS, Harned M. Cervical spinal cord stimulation using monophasic burst waveform for axial neck and upper extremity radicular pain: a preliminary observational study. *Neuromodulation* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31468641>
4. Hao D, Odonkor C, Volney S, Kamdar M, Ahmed S. Management of incidental lumboiliac hernia during spinal cord stimulator implant: a case report. *Reg Anesth Pain Med* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31527161>
5. Hong B, Winkel A, Stumpp N, Abdallat M, Saryyeva A, Runge J, Stiesch M, Krauss JK. Detection of bacterial DNA on neurostimulation systems in patients without overt infection. *Clin Neurol Neurosurg* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31302380>

6. Lempka SF, Zander HJ, Anaya CJ, Wyant A, Ozinga JG 4th, Machado AG. Patient-specific analysis of neural activation during spinal cord stimulation for pain. *Neuromodulation* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31464040>
7. Levy RM, Mekhail N, Kramer J, Poree L, Amirdelfan K, Grigsby E, Staats P, Burton AW, Burgher AH, Scowcroft J, Golovac S, Kapural L, Paicius R, Pope J, Samuel S, McRoberts WP, Schaufele M, Kent AR, Raza A, Deer TR. Therapy habituation at 12 months: spinal cord stimulation versus dorsal root ganglion stimulation for complex regional pain syndrome type I and II. *J Pain* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31494275>
8. Määttä J, Martikainen A, Ikäheimo TM, Nissen M, Viinamäki H, von Und ZuFraunberg M, Huttunen J. Benzodiazepine use is associated with poorer spinal cord stimulation outcome in 373 neuropathic pain patients. *Neuromodulation* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31508883>
9. Mahrous AA, Mousa MH, Elbasiouny SM. The mechanistic basis for successful spinal cord stimulation to generate steady motor outputs. *Front Cell Neurosci* 2019 epub 13:359 <https://www.ncbi.nlm.nih.gov/pubmed/31456665>
10. Nandra MS, Lavrov IA, Edgerton VR, Tai YC. A parylene-based microelectrodearray implant for spinal cord stimulation in rats. *Conf Proc IEEE Eng Med Biol Soc 2011* 2011:1007-1010 <https://www.ncbi.nlm.nih.gov/pubmed/21841938>
11. Orhurhu V, Chu R, Orhurhu MS, Odonkor CA. Association between pain scores and successful spinal cord stimulator implantation. *Neuromodulation* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31489751>
12. Salavatian S, Ardell SM, Hammer M, Gibbons DD, Armour JA, Ardell JL. Thoracic spinal cord neuromodulation obtunds dorsal root ganglion afferent neuronal transduction of the ischemic ventricle. *Am J Physiol Heart Circ Physiol* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31538809>
13. Thornton MA, Mehta MD, Morad TT, Ingraham KL, Khankan RR, Griffis KG, Yeung AK, Zhong H, Roy RR, Edgerton VR, Phelps PE. Evidence of axon connectivity across a spinal cord transection in rats treated with epidural stimulation and motor training combined with olfactory ensheathing cell transplantation. *Exp Neurol* 2018 309:119-133 27 <https://www.ncbi.nlm.nih.gov/pubmed/30056160>
14. Travers SS, Norregaard TV. Spinal cord stimulator failure: migration of a thoracic epidural paddle to the cervical spine. *Surg Neurol Int* 2019 epub 10:118 <https://www.ncbi.nlm.nih.gov/pubmed/31528454>
15. Yakovlev AE, Yakovleva MV, Chaykovskaya MK, Ardashev AV. The first in Russia experience of successful implementation of constant neurostimulation of the spinal cord in the complex treatment of a patient with permanent form of atrial fibrillation combined with spinal stenosis. Russian. *Kardiologija* 2019 59(9):83-90 <https://www.ncbi.nlm.nih.gov/pubmed/31540579>

SNS

1. Jiang L, Zhang N, Zhang S, Chen JD. Sacral nerve stimulation with optimized parameters improves visceral hypersensitivity in rats mediated via the autonomic pathway. *Mol Pain* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31530213>
2. Marinkovic SP. Improving clinical outcomes with lower motor voltage (≤ 3 V) during stage 1 sacral neuromodulation for interstitial cystitis or bladder pain syndrome. *Neurourol Urodyn* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31512775>
3. Meng LF, Zhang W, Zhang YG, Wang JY, Liao LM, Chen GQ, Ling Q, Zhang P, Wei ZQ, Chen Q. Sacral neuromodulation preliminary outcomes in male patients with idiopathic dysuria. Chinese. *Zhonghua Yi Xue Za Zhi* 2019 99(34):2675-2680 <https://www.ncbi.nlm.nih.gov/pubmed/31505718>

EDITORIAL BOARD

Editor-in-chief

[Richard B. North, MD](#)

Section editors

[Thomas Abell, MD](#), Gastric Electrical Stimulation

Tracy Cameron, PhD, Peripheral Nerve Stimulation

[Roger Dmochowski, MD](#), Sacral Nerve Stimulation

Robert Foreman, MD, PhD, Experimental Studies

[Elliot Krames, MD](#), Dorsal Root Ganglion Stimulation

[Bengt Linderöth, MD, PhD](#), Experimental Studies

[Richard B. North, MD](#), Spinal Cord Stimulation

B. Todd Sitzman, MD, MPH, At Large

[Konstantin Slavin, MD, PhD](#), Deep Brain Stimulation

[Kristl Vonck, MD, PhD](#), Deep Brain Stimulation for Epilepsy

Richard Weiner, MD, Peripheral Nerve Stimulation

[Jonathan Young, MD](#), Noninvasive Brain Stimulation

To be determined, Vagus Nerve Stimulation

Managing editor

[Jane Shipley](#)

Disclosure

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

A reminder about personal information

We never share our registrants' personal information or email addresses.

CONTACT

The Neuromodulation Foundation, Inc.

117 East 25th Street

Baltimore, MD 21218

wikistim@gmail.com

wikistim.org

neuromodfound.org