



September 2019 News

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THANK YOU

We thank the North American Neuromodulation Society (NANS) for its continued support of WIKITIM, which this month has taken the form of a grant sufficient to cover several months of WIKISTIM's continued existence as a free resource.

THERE IS STILL TIME TO APPLY FOR THE KUMAR AWARD!

Dr. Krishna Kumar (1931 to 2014) was a great friend to those of us who had the pleasure of knowing him, and he was also among the first to register for WIKISTIM. His legacy lives on in the important research he conducted and the thousands of patients he treated, and NANS honors that legacy with its annual "Kumar New Investigator Award" given to an investigator who completed training within the past 10 years and has published a paper on neuromodulation.



Pictured from the viewer's left to right: Dr. Kumar with WIKISTIM's Editor-in-Chief, Dr. Richard North, and WIKISTIM's Experimental Studies Editor, Dr. Bengt Linderoth, at a meeting of the Canadian Neuromodulation Society in Halifax, Nova Scotia, in June 2009.

The Kumar award includes airfare to the NANS Annual Meeting in January, two nights stay in the conference hotel, and meeting registration as well as a \$5000 grant provided by Medtronic. The awardee also has the opportunity to make a presentation at the plenary session. Those who wish to apply for this year's award should submit a copy of their manuscript and their curriculum vitae along with two letters of recommendation (one from their supervisor) to Caroline McCormack (cmccormack@neuromodulation.org) by September 5th.

SEPTEMBER 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. The two articles that we listed last month with newly completed datasheets received more clicks than any other citation on WIKISTIM.

Most clicked PUBMED links during the past month from previous newsletters

1. 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>
2. Azriel A, Farrand S, Di Biase M, Zalesky A, Lui E, Desmond P, Evans A, Awad M, Moscovici S, Velakoulis D, Bittar RG. Tractography-guided deep brain stimulation of the anteromedial globus pallidus internus for refractory obsessive-compulsive disorder: case report. *Neurosurgery* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31313803>
3. 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>
4. 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>
5. 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>
6. 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>

Most clicked external link(s) during the past month (that remain relevant)

[Neuromodulation: The Science & NYC Neuromodulation](#), October 4-6, 2019, Napa, California.

Membership

In August, the number of our subscribers grew to 1062. Thank you for helping to spread the word!

Number of citations in each section

- DBS 5069, with 2 completed WIKISTIM abstracts
- DRG 106, with 9 completed WIKISTIM abstracts
- GES 486
- PNS 57 (limited to peripheral nerve field stimulation)
- SCS 2364, with 131 completed or partially completed WIKISTIM abstracts
- SNS 960

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 AUGUST 27, 2019

DBS

1. Abboud H, Genc G, Saad S, Thompson N, Oravivattanakul S, Alsallom F, Yu XX, Floden D, Gostkowski M, Ahmed A, Ezzeldin A, Marouf HM, Mansour OY, Fernandez HH. Factors associated with postoperative confusion and prolonged hospital stay following deep brain stimulation surgery for Parkinson disease. *Neurosurgery* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31432068>
2. 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>
3. Amoozegar S, Pooyan M, Roughani M. Toward a closed-loop deep brain stimulation in Parkinson's disease using local field potential in parkinsonian rat model. *Med Hypotheses* 2019 132:109360 <https://www.ncbi.nlm.nih.gov/pubmed/31442919>
4. Bargiotas P, Debove I, Bargiotas I, Lachenmayer ML, Ntafouli M, Vayatis N, Schüpbach MW, Krack P, Bassetti CL. Effects of bilateral stimulation of the subthalamic nucleus in Parkinson's disease with and without REM sleep behaviour disorder. *J Neurol Neurosurg Psychiatry* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31422368>
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>
6. Boutet A, Rashid T, Hancu I, Elias GJB, Gramer RM, Germann J, Dimarzio M, Li B, Paramanandam V, Prasad S, Ranjan M, Coblenz A, Gwun D, Chow CT, Maciel R, Soh D, Fiveland E, Hodaie M, Kalia SK, Fasano A, Kucharczyk W, Pilitsis J, Lozano AM. Functional MRI safety and artifacts during deep

brain stimulation: experience in 102 patients. *Radiology* 2019 epub:190546

<https://www.ncbi.nlm.nih.gov/pubmed/31385756>

7. Cabrera LY. A human rights approach to low data reporting in clinical trials of psychiatric deep brain stimulation. *Bioethics* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31410866>
8. Coenen VA, Schlaepfer TE, Bewernick B, Kilian H, Kaller CP, Urbach H, Li M, Reisert M. Frontal white matter architecture predicts efficacy of deep brain stimulation in major depression. *Transl Psychiatry* 2019 epub 9(1):197 <https://www.ncbi.nlm.nih.gov/pubmed/31434867>
9. da Silva AG, Leal VP, da Silva PR, Freitas FC, Linhares MN, Walz R, Malloy-Diniz LF, Diaz AP, Palha AP. Difficulties in activities of daily living are associated with stigma in patients with Parkinson's disease who are candidates for deep brain stimulation. *Braz J Psychiatry* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31389495>
10. de Gusmao CM, Stone S, Waugh JL, Yang E, Lenk GM, Rodan LH. VAC14 gene-related parkinsonism-dystonia with response to deep brain stimulation. *Mov Disord Clin Pract* 2019 6(6):494-497 <https://www.ncbi.nlm.nih.gov/pubmed/31392254>
11. de Schlichting E, Coll G, Zaldivar-Jolissaint JF, Coste J, Marques AR, Mulliez A, Durif F, Lemaire JJ. Pulse generator battery life in deep brain stimulation: out with the old... in with the less durable? *Acta Neurochir (Wien)* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31444678>
12. Deeb W, Salvato B, Almeida L, Foote KD, Amaral R, Germann J, Rosenberg PB, Tang-Wai DF, Wolk DA, Burke AD, Salloway S, Sabbagh MN, Chakravarty MM, Smith GS, Lyketsos CG, Lozano AM, Okun MS. Fornix-region deep brain stimulation-induced memory flashbacks in Alzheimer's disease. *N Engl J Med* 2019 381(8):783-785 <https://www.ncbi.nlm.nih.gov/pubmed/31433930>
13. Dembek TA, Roediger J, Horn A, Reker P, Oehr C, Dafsari HS, Li N, Kühn AA, Fink GR, Visser-Vandewalle V, Barbe MT, Timmermann L. Probabilistic sweetspots predict motor outcome for DBS in Parkinson's disease. *Ann Neurol* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31376171>
14. Duffley G, Anderson DN, Vorwerk J, Dorval AC, Butson CR. Evaluation of methodologies for computing the deep brain stimulation volume of tissue activated. *J Neural Eng* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31426036>
15. Duits AA, Munneke M, Aalderink CJ, Kuijff ML, Bloem BR, Esselink RAJ. Deep brain stimulation in Parkinson's disease: better balanced through consideration of the psychosocial consequences. *Dutch. Ned Tijdschr Geneesk* 2019 epub:163 <https://www.ncbi.nlm.nih.gov/pubmed/31386314>
16. Enatsu R, Kitagawa M, Mikami T, Kanno A, Komura S, Mikuni N. A case report of multitrack recording of posterior subthalamic nucleus, caudal zona incerta, and prelemniscal radiation: which is most effective for bradykinesia? *NMC Case Rep J* 2019 6(3):91-93 <https://www.ncbi.nlm.nih.gov/pubmed/31417839>
17. Farrokhi FR, Marsans MT, Sikora M, Monsell SE, Wright AK, Palmer M, Hoefler A, McLeod P, Mark J, Carlson J. Pre-operative smoking history increases risk of infection in deep brain stimulation surgery. *J Clin Neurosci* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31445813>
18. Franzini A, Messina G, Levi V, D'Ammando A, Cordella R, Moosa S, Prada F, Franzini A. Deep brain stimulation of the posterior limb of the internal capsule in the treatment of central poststroke neuropathic pain of the lower limb: case series with long-term follow-up and literature review. *J Neurosurg* 2019 epub:1-9 <https://www.ncbi.nlm.nih.gov/pubmed/31419792>
19. Gilmore G, Murgai A, Nazer A, Parrent A, Jog M. Zona incerta deep-brain stimulation in orthostatic tremor: efficacy and mechanism of improvement. *J Neurol* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31414191>
20. Golestanirad L, Kazemivalipour E, Keil B, Downs S, Kirsch J, Elahi B, Pilitsis J, Wald LL. Reconfigurable MRI coil technology can substantially reduce RF heating of deep brain stimulation implants: first in-vitro study of RF heating reduction in bilateral DBS leads at 1.5 T. *PLOS One* 2019 14(8):e0220043 <https://www.ncbi.nlm.nih.gov/pubmed/31390346>

21. Gonzalez-Escamilla G, Muthuraman M, Reich MM, Koirala N, Riedel C, Glaser M, Lange F, Deuschl G, Volkmann J, Groppa S. Cortical network fingerprints predict deep brain stimulation outcome in dystonia. *Mov Disord* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31433874>
22. Guerin B, Angelone LM, Dougherty D, Wald LL. Parallel transmission to reduce absorbed power around deep brain stimulation devices in MRI: impact of number and arrangement of transmit channels. *Magn Reson Med* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31389069>
23. Horn A, Wenzel G, Irmen F, Huebl J, Li N, Neumann WJ, Krause P, Bohner G, Scheel M, Kühn AA. Deep brain stimulation induced normalization of the human functional connectome in Parkinson's disease. *Brain* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31412106>
24. Jakobs M, Helmers AK, Synowitz M, Slotty PJ, Anthofer JM, Schlaier JR, Kloss M, Unterberg AW, Kiening KL. A multicenter, open-label, controlled trial on acceptance, convenience, and complications of rechargeable internal pulse generators for deep brain stimulation: the Multi Recharge Trial. *J Neurosurg* 2019 epub:1-9 <https://www.ncbi.nlm.nih.gov/pubmed/31419794>
25. Jamy R, Kaur M, Pizarro D, Toth E, Pati S. Practice trends and the outcome of neuromodulation therapies in epilepsy: a single-center study. *Epilepsia Open* 2019 4(3):493-497 <https://www.ncbi.nlm.nih.gov/pubmed/31440731>
26. Kochanski RB, Bus S, Brahimaj B, Borghei A, Kraimer KL, Keppetipola KM, Beehler B, Pal G, Metman LV, Sani S. The impact of microelectrode recording on lead location in deep brain stimulation for the treatment of movement disorders. *World Neurosurg* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31449992>
27. Krishna V, Sammartino F, Rabbani Q, Changizi B, Agrawal P, Deogaonkar M, Knopp M, Young N, Rezai A. Connectivity-based selection of optimal deep brain stimulation contacts: a feasibility study. *Ann Clin Transl Neurol* 2019 6(7):1142-1150 <https://www.ncbi.nlm.nih.gov/pubmed/31353863>
28. Malekmohammadi M, Price CM, Hudson AE, DiCesare JAT, Pouratian N. Propofol-induced loss of consciousness is associated with a decrease in thalamocortical connectivity in humans. *Brain* 2019 142(8):2288-2302 <https://www.ncbi.nlm.nih.gov/pubmed/31236577>
29. Milosevic L, Dallapiazza RF, Munhoz RP, Kalia SK, Popovic MR, Hutchison WD. Case studies in neuroscience: lack of inhibitory synaptic plasticity in the substantia nigra pars reticulata of a patient with lithium-induced tremor. *J Neurophysiol* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31411948>
30. Milosevic L, Kalia SK, Hodaie M, Lozano A, Popovic MR, Hutchison W. Subthalamic suppression defines therapeutic threshold of deep brain stimulation in Parkinson's disease. *J Neurol Neurosurg Psychiatry* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31422369>
31. Mori F, Yoshida K, Watanabe M, Kobayashi K, Fukaya C, Oshima H, Yoshino A. Frontal lobe signs caused by migration of a burr hole cap into the brain after deep brain stimulation surgery: a case report. *Japanese. No Shinkei Geka* 2019 47(7):785-791 <https://www.ncbi.nlm.nih.gov/pubmed/31358698>
32. Natu VS, Lin JJ, Burks A, Arora A, Rugg MD, Lega B. Stimulation of the posterior cingulate cortex impairs episodic memory encoding. *J Neurosci* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31358651>
33. Pastor J, Vega-Zelaya L. A new potential specifically marks the sensory thalamus in anaesthetised patients. *Clin Neurophysiol* 2019 130(10):1926-1936 <https://www.ncbi.nlm.nih.gov/pubmed/31437745>
34. Pusswald G, Wiesbauer P, Pirker W, Novak K, Foki T, Lehrner J. Depression, quality of life, activities of daily living, and subjective memory after deep brain stimulation in Parkinson disease—a reliable change index analysis. *Int J Geriatr Psychiatry* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31368144>

35. Sa M, Singh R, Pujar S, D'Arco F, Desai N, Eltze C, Hughes E, Al Obaidi M, Eleftheriou D, Tisdall M, Selway R, Cross JH, Kaliakatsos M, Valentin A. Centromedian thalamic nuclei deep brain stimulation and anakinra treatment for FİRES - two different outcomes. *Eur J Paediatr Neurol* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31446001>
36. Saatçi Ö, Yılmaz NH, Zırh A, Yulug B. The therapeutic effect of deep brain stimulation on olfactory functions and clinical scores in Parkinson's disease. *J Clin Neurosci* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31383472>
37. Santos-Valencia F, Almazán-Alvarado S, Rubio-Luviano A, Valdés-Cruz A, Magdaleno-Madrigal VM, Martínez-Vargas D. Temporally irregular electrical stimulation to the epileptogenic focus delays epileptogenesis in rats. *Brain Stimul* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31378602>
38. Schruers K, Baldi S, van den Heuvel T, Goossens L, Luyten L, Leentjens AFG, Ackermans L, Temel Y, Viechtbauer W. The effects of deep-brain non-stimulation in severe obsessive-compulsive disorder: an individual patient data meta-analysis. *Transl Psychiatry* 2019 9(1):183 <https://www.ncbi.nlm.nih.gov/pubmed/31383848>
39. Schuhmann MK, Stoll G, Papp L, Bohr A, Volkmann J, Fluri F. Electrical stimulation of the mesencephalic locomotor region has no impact on blood-brain barrier alterations after cerebral photothrombosis in rats. *Int J Mol Sci* 2019 epub:20(16) <https://www.ncbi.nlm.nih.gov/pubmed/31430854>
40. Shao MM, Liss A, Park YL, DiMarzio M, Prusik J, Hobson E, Adam O, Durphy J, Sukul V, Danisi F, Feustel P, Slyer J, Truong H, Pilitsis JG. Early experience with new generation deep brain stimulation leads in Parkinson's disease and essential tremor patients. *Neuromodulation* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31436001>
41. Soares MI, Soares-Dos-Reis R, Rosas MJ, Monteiro P, Massano J. Intraoperative microelectrode recording in Parkinson's disease subthalamic deep brain stimulation: analysis of clinical utility. *J Clin Neurosci* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31416732>
42. Stavrinou LC, Liouta E, Boviatsis EJ, Leonardos A, Gatzonis S, Stathis P, Sakas DE, Angelakis E. Effect of constant-current pallidal deep brain stimulation for primary dystonia on cognition, mood and quality of life: results from a prospective pilot trial. *Clin Neurol Neurosurg* 2019 185:105460 <https://www.ncbi.nlm.nih.gov/pubmed/31442741>
43. Vissani M, Cordella R, Micera S, Eleopra R, Romito L, Mazzoni A. Spatio-temporal structure of single neuron subthalamic activity identifies DBS target for anesthetized Tourette syndrome patients. *J Neural Eng* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31370042>
44. Weerasinghe G, Duchet B, Cagnan H, Brown P, Bick C, Bogacz R. Predicting the effects of deep brain stimulation using a reduced coupled oscillator model. *PLOS Comput Biol* 2019 15(8):e1006575 <https://www.ncbi.nlm.nih.gov/pubmed/31393880>
45. Weissbach A, Udupa K, Ni Z, Gunraj C, Rinchon C, Baarbe J, Fasano A, Munhoz RP, Lang A, Tadic V, Brüggemann N, Münchau A, Bäumer T, Chen R. Single-pulse subthalamic deep brain stimulation reduces premotor-motor facilitation in Parkinson's disease. *Parkinsonism Relat Disord* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31427071>
46. Wickramasuriya DS, Amin MR, Faghih RT. Skin conductance as a viable alternative for closing the deep brain stimulation loop in neuropsychiatric disorders. *Front Neurosci* 2019 13:780 <https://www.ncbi.nlm.nih.gov/pubmed/31447627>
47. Young NA, Brown MP, Peng J, Kline D, Reider C, Deogaonkar M. Predicting extended hospital stay after deep brain stimulation surgery in Parkinson's patients. *J Clin Neurosci* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31431404>
48. Yuan L, Zhang S, Liang S, Liu N, Yu X, Liang S. Deep brain stimulation of the anterior nucleus of the thalamus in a patient with super-refractory convulsive status epilepticus. *Epileptic Disord* 2019 21(4):379-384 <https://www.ncbi.nlm.nih.gov/pubmed/31403465>

49. Zhang S, Silburn P, Pouratian N, Cheeran B, Venkatesan L, Kent A, Schnitzler A. Comparing current steering technologies for directional deep brain stimulation using a computational model that incorporates heterogeneous tissue properties. *Neuromodulation* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31423642>
50. Zheng XS, Snyder NR, Woeppel K, Hanner J, Li X, Eles J, Kolarcik CL, Tracy Cui X. A superoxide scavenging coating for improving tissue response to neural implants. *Acta Biomater* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31446048>
51. Zong H, Meng F, Zhang Y, Wei G, Zhao H. Clinical study of the effects of deep brain stimulation on urinary dysfunctions in patients with Parkinson's disease. *Clin Interv Aging* 2019 14:1159-1166 <https://www.ncbi.nlm.nih.gov/pubmed/31417246>

DRG

No new papers reporting primary data this month.

GES

No new papers reporting primary data this month. (Our GES editor notes that more publications are in the pipeline.)

PNS

1. van Gorp EJAA, Adang EMM, Gültuna I, Hamm-Faber TE, Bürger K, Kallewaard JW, Schapendonk JWCL, Vonhögen L, Bronkhorst E, Teernstra OP, Vissers KCP. Cost-effectiveness analysis of peripheral nerve field stimulation as add-on therapy to spinal cord stimulation in the treatment of chronic low back pain in failed back surgery syndrome patients. *Neuromodulation* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31423686>

SCS

1. Al-Kaisy A, Van Buyten JP, Carganillo R, Caraway D, Gliner B, Subbaroyan J, Panwar C, Rotte A, Amirdelfan K, Kapural L. 10 kHz SCS therapy for chronic pain, effects on opioid usage: post hoc analysis of data from two prospective studies. *Sci Rep* 2019 9(1):11441 <https://www.ncbi.nlm.nih.gov/pubmed/31391503>
2. Arnold FW, Bishop S, Johnson D, Scott L, Heshman C, Oppy L, Ball T, Sharma M, Angeli C, Ferreira C, Chen Y, Harkema S, Boakye M. Root cause analysis of epidural spinal cord stimulator implant infections with resolution after implementation of an improved protocol for surgical placement. *J Infect Prev* 2019 20(4):185-190 <https://www.ncbi.nlm.nih.gov/pubmed/31428199>
3. Canbay S, Gel G, Durgal A, Mammadkhanli O. Spinal cord stimulation in a patient with multiple sclerosis and failed back surgery syndrome. *Neurosciences (Riyadh)* 2019 24(3):221-224 <https://www.ncbi.nlm.nih.gov/pubmed/31380822>
4. Huang Z, Xu X, Dong Q, Wei L, Lin Y, Jiao J, Lu Z, Qin F. God locked you in the room, but left a window open: a case report of spinal cord stimulation in locked-in syndrome. *Brain Stimul* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31434619>
5. Jozwiak MJ, Wu H. Complex regional pain syndrome management: an evaluation of the risks and benefits of spinal cord stimulator use in pregnancy. *Pain Pract* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31357254>
6. Kent AR, Weisshaar CL, Venkatesan L, Winkelstein BA. Burst & high-frequency spinal cord stimulation differentially effect spinal neuronal activity after radiculopathy. *Ann Biomed Eng* 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31385104>
7. Meuwissen KPV, de Vries LE, Zhang TC, Gu JW, Joosten EAJ. Burst and tonic spinal cord stimulation both activate spinal GABAergic mechanisms to attenuate pain in a rat model of

chronic neuropathic pain. Pain Pract 2019 epub

<https://www.ncbi.nlm.nih.gov/pubmed/31424152>

8. Reddy R, Prasad R, Rejai S, Halter K, Chen J. Relief of neuropathic pain after spinal cord stimulator implantation in a patient with idiopathic thoracic transverse myelitis: a case report. A A Pract 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31449073>
9. Slyer J, Scott S, Sheldon B, Hancu M, Bridger C, Pilitsis JG. Less pain relief, more depression, and female sex correlate with spinal cord stimulation explants. Neuromodulation 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31429165>
10. Urits I, Osman M, Orhurhu V, Viswanath O, Kaye AD, Simopoulos T, Yazdi C. A case study of combined perception-based and perception-free spinal cord stimulator therapy for the management of persistent pain after a total knee arthroplasty. Pain Ther 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31432457>
11. van Gorp EJAA, Adang EMM, Gültuna I, Hamm-Faber TE, Bürger K, Kallewaard JW, Schapendonk JWCL, Vonhögen L, Bronkhorst E, Teernstra OP, Vissers KCP. Cost-effectiveness analysis of peripheral nerve field stimulation as add-on therapy to spinal cord stimulation in the treatment of chronic low back pain in failed back surgery syndrome patients. Neuromodulation 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31423686>

SNS

1. Chavez MR, Chase A, Clark CE, Turner J. Sacral nerve stimulator for the treatment of nocturnal fecal incontinence. Am Surg 2019 85(7):e356-e357 <https://www.ncbi.nlm.nih.gov/pubmed/31405445>
2. Huang Z, Li S, Foreman RD, Yin J, Dai N, Chen JD. Sacral nerve stimulation with appropriate parameters improves constipation in rats by enhancing colon motility mediated via the autonomic-cholinergic mechanisms. Am J Physiol Gastrointest Liver Physiol 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31411502>
3. Ozdemir Koken Z, Sezer RE, Tosun K. Nursing care of the patient with neurogenic bladder after kidney transplantation: a case report. Transplant Proc 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31405733>
4. Potts BA, Degoski DJ, Brooks JM, Peterson AC, Nelson DE, Brink TS, Fraser MO. Timing of sacral neurostimulation is important for increasing bladder capacity in the anesthetized rat. Am J Physiol Renal Physiol 2019 epub <https://www.ncbi.nlm.nih.gov/pubmed/31411072>

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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.

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