



September 2020 News

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FREE WEBINAR FROM NEUROVATIONS

On Thursday, September 10th from 5:30 to 6:50 Pacific Daylight Time, Drs. Eric Grigsby and Ricardo Vallejo will describe differential target multiplexed (DTM™) spinal cord stimulation and present a hypothesis on its mechanism of action. [Registration is free.](#)

FROM ONE MONTH TO THE NEXT

We continue to work from the pandemic prison created by SARS-CoV-2, but solitary confinement has eased in the past month as we have learned more about ways to prevent transmission of the virus. A glowing example of success in that regard is the experience mitigating and preventing at [four sleep-over camps in Maine](#), with a total of 1022 attendees. Another success story is the detection of the virus and prevention of dissemination at a dorm at the [University of Arizona](#) by testing wastewater. We are also pleased to report that the staff and residents at the Baltimore nursing home we have been discussing remain infection-free.

NEXT IMPROVEMENT—PNS SECTION

At present WIKISTIM is divided by stimulation target into seven sections, and we believe the list of papers reporting primary data or study protocols is comprehensive for five of them. The sections on non-invasive brain stimulation and peripheral nerve stimulation (PNS) have been under development, and we are pleased to report that we are gearing up to make the PNS section as comprehensive as possible in the next few months. As always, please tell us if you know of additional papers for inclusion that meet our criteria.

We continue to send our best wishes to everyone reading this newsletter along with our hope that you are and remain safe and healthy.

SEPTEMBER 2020 STATISTICS

Membership

In August, the number of our subscribers grew to 1318. Thank you for helping to spread the word!

Number of citations in each section

- DBS 5659, with 2 completed WIKISTIM abstracts
- DRG 139, with 9 completed WIKISTIM abstracts

- GES 500
- PNS 64 (limited to peripheral nerve field stimulation)
- SCS 2555 with 133 completed or partially completed WIKISTIM abstracts
- SNS 1032

CITATIONS ADDED FROM SEARCH ON August 28, 2020

See below for the list of citations that received the most clicks in the past month.

DBS

1. Ahn M, Lee S, Lauro PM, Schaeffer EL, Akbar U, Asaad WF. Rapid motor fluctuations reveal short-timescale neurophysiological biomarkers of Parkinson's disease. *J Neural Eng* 2020 17(4):046042 [PubMed Free Full Text](#)
2. Atchley TJ, Elsayed GA, Sowers B, Walker HC, Chagoya G, Davis MC, Bernstock JD, Omar NB, Patel DM, Guthrie BL. Incidence and risk factors for seizures associated with deep brain stimulation surgery. *J Neurosurg* 2020 epub 1-5 [PubMed](#)
3. Atkinson-Clement C, Tarrano C, Porte CA, Wattiez N, Delorme C, McGovern EM, Brochard V, Thobois S, Tranchant C, Grabli D, Degos B, Corvol JC, Pedespan JM, Krystkowiak P, Houeto JL, Degardin A, Defebvre L, Valabregue R, Rosso C, Apartis E, Vidailhet M, Pouget P, Roze E, Worbe Y. Dissociation in reactive and proactive inhibitory control in myoclonus dystonia. *Sci Rep* 2020 10(1):13933 [PubMed Free Full Text](#)
4. Bahners BH, Florin E, Rohrhuber J, Krause H, Hirschmann J, van de Vijver R, Schnitzler A, Butz M. Deep brain stimulation does not modulate auditory-motor integration of speech in Parkinson's disease. *Front Neurol* 2020 epub 11:655 [PubMed Free Full Text](#)
5. Benis D, Haegelen C, Voruz P, Pierce J, Milesi V, Houvenaghel JF, Vérin M, Sauleau P, Grandjean D, Péron J. Subthalamic nucleus oscillations during vocal emotion processing are dependent of the motor asymmetry of Parkinson's disease. *Neuroimage* 2020 222:117215 [PubMed Free Full Text](#)
6. Beucke JC, Simon D, Sepulcre J, Talukdar T, Feusner JD, Kaufmann C, Kathmann N. Heightened degree connectivity of the striatum in obsessive-compulsive disorder induced by symptom provocation. *J Affect Disord* 2020 276:1069-1076 [PubMed](#)
7. Cabrera LY, Nowak GR 3rd, McCright AM, Achtyes E, Bluhm R. Last resort interventions?: a qualitative study of psychiatrists' experience with and views on psychiatric electroceutical interventions. *Psychiatr Q* 2020 epub [PubMed](#)
8. Cagle JN, Deeb W, Eisinger RS, Molina R, Opri E, Holland MT, Foote KD, Okun MS, Gunduz A. Lead repositioning guided by both physiology and atlas based targeting in Tourette deep brain stimulation. *Tremor Other Hyperkinet Mov (NY)* 2020 epub 10:18 [PubMed Free Full Text](#)
9. Chau AMT, Jacques A, Lind CR. Defining the border of the subthalamic nucleus for deep brain stimulation: a proposed model using the symmetrical sigmoid curve function. *World Neurosurg* 2020 epub [PubMed](#)
10. Chen Y, Zhu G, Liu D, Zhang X, Liu Y, Yuan T, Du T, Zhang J. Subthalamic nucleus deep brain stimulation suppresses neuroinflammation by fractalkine pathway in Parkinson's disease rat model. *Brain Behav Immun* 2020 epub [PubMed](#)
11. Choi JW, Malekmohammadi M, Sparks H, Kashanian A, Cross KA, Bordelon Y, Pouratian N. Altered pallidocortical low-beta oscillations during self-initiated movements in Parkinson disease. *Front Syst Neurosci* 2020 epub 14:54 [PubMed Free Full Text](#)
12. Crispo JAG, Lam M, Le B, Shariff SZ, Ansell DR, Squarzolo M, Ouellette D, Thibault DP, Marras C, Willis AW, Seitz D. Survival and health care use after deep brain stimulation for Parkinson's disease. *Can J Neurol Sci* 2020 epub 1-28 [PubMed](#)
13. Dietrich AD, Koeppen JA, Buhmann C, Pötter-Nerger M, Pinnschmidt HO, Oehlwein C, Oehlwein

- M, Mittmann K, Gerloff C, Engel AK, Westphal M, Schaper M, Hamel W, Moll CKE, Gulberti A. Sex disparities in the self-evaluation of subthalamic deep brain stimulation effects on mood and personality in Parkinson's disease patients. *Front Neurol* 2020 epub 11:776 [PubMed](#) [Free Full Text](#)
14. Drummond NM, Chen R. Deep brain stimulation and recordings: insights into the contributions of subthalamic nucleus in cognition. *Neuroimage* 2020 epub 117300 [PubMed](#)
15. Eggink H, Toonen RF, van Zijl JC, van Egmond ME, Bartels AL, Brandsma R, Contarino MF, Peall KJ, van Dijk JMC, Oterdoom DLM, Beudel M, Tijssen MAJ. The effectiveness of deep brain stimulation in dystonia: a patient-centered approach. *Tremor Other Hyperkinet Mov (NY)* 2020 epub 10:2 [PubMed](#) [Free Full Text](#)
16. Eisinger RS, Scott BM, Le A, Ponce EMT, Lanese J, Hundley C, Nelson B, Ravy T, Lopes J, Thompson S, Sathish S, O'Connell RL, Okun MS, Bowers D, Gunduz A. Pavlovian bias in Parkinson's disease: an objective marker of impulsivity that modulates with deep brain stimulation. *Sci Rep* 2020 10(1):13448 [PubMed](#) [Free Full Text](#)
17. Enatsu R, Kitagawa M, Morishita T, Sasagawa A, Kuribara T, Hirano T, Arihara M, Mikami T, Mikuni N. Effect of cycling thalamo-subthalamic stimulation on tremor habituation and rebound in Parkinson's disease. *World Neurosurg* 2020 epub [PubMed](#)
18. Fleischer M, Endres H, Sendtner M, Volkmann J. Development of a fully implantable stimulator for deep brain stimulation in mice. *Front Neurosci* 2020 epub 14:726 [PubMed](#) [Free Full Text](#)
19. Holla VV, Neeraja K, Surisetti BK, Prasad S, Kamble N, Srinivas D, Yadav R, Pal PK. Deep brain stimulation battery exhaustion during the covid-19 pandemic: crisis within a crisis. *J Mov Disord* 2020 epub [PubMed](#)
20. İbrahimoglu Ö, Mersin S, Akyol E. The experiences of patients with deep brain stimulation in Parkinson's disease: challenges, expectations, and accomplishments. *Acta Med Acad* 2020 49(1):36-43 [PubMed](#) [Free Full Text](#)
21. Jiang Z, Harati S, Crowell A, Mayberg H, Nemati S, Clifford G. Classifying major depressive disorder and response to deep brain stimulation over time by analyzing facial expressions. *IEEE Trans Biomed Eng* 2020 epub [PubMed](#)
22. Jones SE, Lempka SF, Gopalakrishnan R, Baker KB, Beall EB, Bhattacharyya P, Huang X, Lin J, Chen J, Lowe MJ, Malone DA, Machado AG. Functional magnetic resonance imaging correlates of ventral striatal deep brain stimulation for poststroke pain. *Neuromodulation* 2020 epub [PubMed](#) [Full Text](#)
23. Kim M, Jung NY, Chang JW. Image analysis of the intracranial lead bending phenomenon during deep brain stimulation. *PLOS One* 2020 15(8):e0237537 [PubMed](#) [Free Full Text](#)
24. Larkin MB, McGinnis JP, Snyder RI, Storch EA, Goodman WK, Viswanathan A, Sheth SA. Neurostimulation for treatment-resistant posttraumatic stress disorder: an update on neurocircuitry and therapeutic targets. *J Neurosurg* 2020 epub 1-9 [PubMed](#)
25. Liebrand LC, Natarajan SJ, Caan MWA, Schuurman PR, van den Munckhof P, de Kwaasteniet B, Luigjes J, Bergfeld IO, Denys D, van Wingen GA. Distance to white matter trajectories is associated with treatment response to internal capsule deep brain stimulation in treatment-refractory depression. *Neuroimage Clin* 2020 epub 28:102363 [PubMed](#) [Free Full Text](#)
26. Lo Buono V, Palmeri R, Stroscio G, Corallo F, Di Lorenzo G, Sorbera C, Ciurleo R, Cimino V, Bramanti P, Marino S, Bonanno L. The effect on deep brain stimulation of subthalamic nucleus and dopaminergic treatment in Parkinson disease. *Medicine (Baltimore)* 2020 99(32):e21578 [PubMed](#) [Free Full Text](#)
27. Lu CW, Chou KL, Patil PG. Correspondence of optimal stimulation and beta power varies regionally in STN DBS for Parkinson disease. *Parkinsonism Relat Disord* 2020 78:124-128 [PubMed](#)
28. Lu G, Luo L, Liu M, Zheng Z, Zhang B, Chen X, Hua X, Fan H, Mo G, Duan J, Li M, Hong T, Zhou D. Outcomes and adverse effects of deep brain stimulation on the ventral intermediate nucleus in

- patients with essential tremor. *Neural Plast* 2020;2020:2486065 [PubMed](#) [Free Full Text](#)
29. Martinez-Martin P, Deuschl G, Tonder L, Schnitzler A, Houeto JL, Timmermann L, Rau J, Schade-Brittinger C, Stoker V, Vidailhet M, Krack P; EARLYSTIM Study Group. Interpretation of health-related quality of life outcomes in Parkinson's disease from the EARLYSTIM Study. *PLOS One* 2020;15(8):e0237498 [PubMed](#) [Free Full Text](#)
30. McAuley MD. Incorrect calculation of total electrical energy delivered by a deep brain stimulator. *Brain Stimul* 2020;13(5):1414-1415 [PubMed](#) [Free Full Text](#)
31. Meng Y, Pople CB, Kalia SK, Kalia LV, Davidson B, Bigioni L, Li DZ, Suppiah S, Mithani K, Scantlebury N, Schwartz ML, Hamani C, Lipsman N. Cost-effectiveness analysis of MR-guided focused ultrasound thalamotomy for tremor-dominant Parkinson's disease. *J Neurosurg* 2020;epub 1-6 [PubMed](#)
32. Mozaffarzadeh M, Minonzio C, Jong N, Verweij MD, Hemm S, Daeichin V. Lamb waves and adaptive beamforming for aberration correction in medical ultrasound imaging. *IEEE Trans Ultrason Ferroelectr Freq Control* 2020;epub [PubMed](#)
33. Naro A, Pignolo L, Sorbera C, Latella D, Billeri L, Manuli A, Portaro S, Bruschetta D, Calabò RS. A case-controlled pilot study on rhythmic auditory stimulation-assisted gait training and conventional physiotherapy in patients with Parkinson's disease submitted to deep brain stimulation. *Front Neurol* 2020;epub 11:794 [PubMed](#) [Free Full Text](#)
34. Nguyen BT, Pilitsis J, Golestani Rad L. The effect of simulation strategies on prediction of power deposition in the tissue around electronic implants during magnetic resonance imaging. *Phys Med Biol* 2020;epub [PubMed](#)
35. Nybø CJ, Gustavsson EK, Farrer MJ, Aasly JO. Neuropathological findings in PINK1-associated Parkinson's disease. *Parkinsonism Relat Disord* 2020;78:105-108 [PubMed](#)
36. Orcutt T, Vitek J, Patriat R, Harel N, Matsumoto J. Apraxia of eyelid opening improved by pallidal stimulation in progressive supranuclear palsy. *Mov Disord Clin Pract* 2020;7(6):698-700 [PubMed](#)
37. Park KW, Jo S, Kim MS, Choi N, Jeon SR, Park HK, Kwon KY, Lee CS, Chung SJ. Cognitive profile as a predictor of the long-term outcome after deep brain stimulation in Parkinson's disease. *J Neurol Sci* 2020;epub 417:117063 [PubMed](#)
38. Piña-Fuentes D, van Dijk JMC, van Zijl JC, Moes HR, van Laar T, Oterdoom DLM, Little S, Brown P, Beudel M. Acute effects of adaptive deep brain stimulation in Parkinson's disease. *Brain Stimul* 2020;epub [PubMed](#) [Free Full Text](#)
39. Poortvliet PC, Mellick G, Coyne T, Silburn P. A rare case of green gelatinous mass formation on a deep brain stimulation implantable pulse generator. *J Mov Disord* 2020;epub [PubMed](#)
40. Poulen G, Chan Seng E, Menjot De Champfleur N, Cif L, Cyprien F, Perez J, Coubes P. Comparison between 1.5- and 3-T magnetic resonance acquisitions for direct targeting stereotactic procedures for deep brain stimulation: a phantom study. *Stereotact Funct Neurosurg* 2020;epub [PubMed](#)
41. Qi R, Geng X, Huang B, Chen Y, Jiang H, Zou Y, Wang W, Li Y, Li Y, Yin L, Liu A, Yang X, Li J, Yu H. Outcomes of STN-DBS in PD patients with different rates of disease progression over one year of follow-up. *Front Neurol* 2020;epub 11:600 [PubMed](#) [Free Full Text](#)
42. Schleyken S, Baldermann J, Huys D, Franklin J, Visser-Vandewalle V, Kuhn J, Kohl S. Deep brain stimulation and sensorimotor gating in Tourette syndrome and obsessive-compulsive disorder. *J Psychiatr Res* 2020;129:272-280 [PubMed](#)
43. Sedov A, Usova S, Popov V, Tomskiy A, Jinnah HA, Shaikh AG. Feedback dependent neuronal properties make focal dystonias so focal. *Eur J Neurosci* 2020;epub [PubMed](#)
44. Shah SA, Brown P, Gimeno H, Lin JP, McClelland VM. Application of machine learning using decision trees for prognosis of deep brain stimulation of globus pallidus internus for children with dystonia. *Front Neurol* 2020;epub 11:825 [PubMed](#) [Free Full Text](#)
45. Sobstyl M, Stapińska-Syniec A, Rylski M. Deep brain stimulation for the treatment of refractory

- and super-refractory status epilepticus. *Seizure* 2020 81:58-62 [PubMed](#)
- 46. Spatz JM, Conner AK, Young JS, Starr PA. Intraoperative stereotactic frame registration using a three-dimensional imaging system with and without preoperative computed tomography for image fusion. *Stereotact Funct Neurosurg* 2020 epub 1-6 [PubMed](#)
 - 47. Stoker V, Krack P, Tonder L, Barnett G, Durand-Zaleski I, Schnitzler A, Houeto JL, Timmermann L, Rau J, Schade-Brittinger C, Vidailhet M, Deuschl G; EARLYSTIM Study Group. Deep brain stimulation impact on social and occupational functioning in Parkinson's disease with early motor complications. *Mov Disord Clin Pract* 2020 7(6):672-680 [PubMed](#) [Free Full Text](#)
 - 48. Szántó I, Sándor B, Katona K, Nagy M, Juhász A, Balás I. Objective measurement of manual dexterity of Parkinson patients operated with DBS. Hungarian. *Ideggyogy Sz* 2020 73(7-08):255-259 [PubMed](#)
 - 49. Tambirajoo K, Furlanetti L, Samuel M, Ashkan K. Subthalamic nucleus deep brain stimulation in post-infarct dystonia. *Stereotact Funct Neurosurg* 2020 epub 1-13 [PubMed](#)
 - 50. Tan SZK, Neoh J, Lawrence AJ, Wu EX, Lim LW. Prelimbic cortical stimulation improves spatial memory through distinct patterns of hippocampal gene expression in aged rats. *Neurotherapeutics* 2020 epub [PubMed](#)
 - 51. Ten Brinke TR, Arnts H, Schuurman R, van den Munckhof P. Directional sensory thalamus deep brain stimulation in poststroke refractory pain. *BMJ Case Rep* 2020 13(8):e233254 [PubMed](#)
 - 52. Valsky D, Heiman Grosberg S, Israel Z, Boraud T, Bergman H, Deffains M. What is the true discharge rate and pattern of the striatal projection neurons in Parkinson's disease and dystonia? *Elife* 2020 9:e57445 [PubMed](#)
 - 53. Vorwerk J, McCann D, Krüger J, Butson CR. Interactive computation and visualization of deep brain stimulation effects using Duality. *Comput Methods Biomed Eng Imaging Vis* 2020 8(1):3-14 [PubMed](#)
 - 54. Wadhwa A, Schaefer S, Gerrard J, Deeb W, Okun MS, Patel A. Deep brain stimulation target selection in co-morbid essential tremor and Parkinson's disease. *Tremor Other Hyperkinet Mov (NY)* 2020 epub 10:17 [PubMed](#) [Free Full Text](#)
 - 55. Werner C, Mathkour M, Scullen T, Houghton D, Lea G, Dallapiazza RF, Kahn L, Smith RD. Effects of medical comorbidities on the surgical outcomes of deep brain stimulation for Parkinson's disease: a retrospective, single-institution study. *World Neurosurg* 2020 epub [PubMed](#)
 - 56. Wu Y, Su D, Wang Y, Li H, Zhang C, Sun B, Li D, Wu Y. Deep brain stimulation and thalamotomy for the treatment of dystonia acquired by moyamoya disease with stroke. *Tremor Other Hyperkinet Mov (NY)* 2020 epub 10:11 [PubMed](#) [Free Full Text](#)
 - 57. Xu J, Galardi MM, Pok B, Patel KK, Zhao CW, Andrews JP, Singla S, McCafferty CP, Feng L, Musonza ET, Kundishora AJ, Gummadavelli A, Gerrard JL, Laubach M, Schiff ND, Blumenfeld H. Thalamic stimulation improves postictal cortical arousal and behavior. *J Neurosci* 2020 epub [PubMed](#)
 - 58. Yi G, Wang J. Frequency-dependent energy demand of dendritic responses to deep brain stimulation in thalamic neurons: a model-based study. *IEEE Trans Neural Netw Learn Syst* 2020 epub [PubMed](#)
 - 59. Zhang C, Ramirez-Zamora A, Meng F, Lin Z, Lai Y, Li D, Chang J, Morishita T, Inoue T, Fujioka S, Oyama G, Coyne T, Voon V, Doshi PK, Wu Y, Liu J, Patel B, Almeida L, Wagle Shukla AA, Hu W, Foote K, Zhang J, Sun B, Okun MS. An international survey of deep brain stimulation utilization in Asia and Oceania: The DBS Think Tank East. *Front Hum Neurosci* 2020 epub 14:162 [PubMed](#) [Free Full Text](#)
 - 60. Zhu B, Farivar M, Shoaran M. ResOT: Resource-efficient oblique trees for neural signal classification. *IEEE Trans Biomed Circuits Syst* 2020 14(4):692-704 [PubMed](#)
 - 61. Zhu R, Zhang Y, Wang T, Wei H, Zhang C, Li D, Zhan S, Sun B. Deep brain stimulation of nucleus accumbens with anterior capsulotomy for drug addiction: a case report. *Stereotact Funct*

DRG

1. Abbass M, Santyr BG, Parrent AG, MacDougall KW, Staudt MD. Paresthesia-free spinal nerve root stimulation for the treatment of chronic neuropathic pain. Neuromodulation 2020 23(6):831-837 PubMed <https://pubmed.ncbi.nlm.nih.gov/32725757> [Full Text](#)
2. Chapman KB, Nagrani S, Patel KV, Yousef T, van Helmond N. Lumbar dorsal root ganglion stimulation lead placement using an outside-in technique in 4 patients with failed back surgery syndrome: a case series. A A Pract 2020 14(10):e01300 [PubMed](#)
3. Pinckard-Dover H, Palmer A, Petersen EA. A review of neuromodulation for treatment of complex regional pain syndrome in pediatric patients and novel use of dorsal root ganglion stimulation in an adolescent patient with 30-month follow-up. Neuromodulation 2020 epub [PubMed Full Text](#)
4. Tolba R, Wickboldt AT, Peairs A, Mohamed HE, Storey M, Abd-Elsayed A. Dorsal root ganglion stimulation for the treatment of severe intractable pain related to obturator nerve entrapment neuropathy: a case report. Clin Neurol Neurosurg 2020 epub 198:106138 [PubMed](#)

PNS

1. Eldabe SS, Taylor RS, Goossens S, Bouche B, Gültuna I, Green C, Tinsley J, Luyet PP, Buchser E. A randomized controlled trial of subcutaneous nerve stimulation for back pain due to failed back surgery syndrome: the SubQStim study. Neuromodulation 2019 22(5):519-528 [PubMed Free Full Text](#)
2. Gargya A, Singh H, Lin T, Gulati A. Extraforaminal thoracic and lumbar spinal nerve ultrasound-guided percutaneous peripheral nerve stimulation. Pain Med 2020 21(Suppl 1):S38-S40 [PubMed Free Full Text](#)
3. Schwarm FP, Ott M, Nagl J, Bender M, Stein M, Uhl E, Maxeiner H, Kolodziej MA. The predictive value of transcutaneous electrical nerve stimulation for patient selection in peripheral nerve field stimulation for chronic low back pain: a prospective study. Neuromodulation 2020 epub [PubMed Full Text](#)
4. Stabingas K, Bergman J, Patterson M, Tomycz ND. Peripheral subcutaneous field stimulation for the treatment of spinal cord injury at-level pain: case report, literature review, and 5-year follow-up. Heliyon 2020 6(7):e04515 [PubMed Free Full Text](#)

SCS

1. Abbass M, Santyr BG, Parrent AG, MacDougall KW, Staudt MD. Paresthesia-free spinal nerve root stimulation for the treatment of chronic neuropathic pain. Neuromodulation 2020 23(6):831-837 [PubMed Full Text](https://pubmed.ncbi.nlm.nih.gov/32725757)
2. Al-Kaisy A, Royds J, Al-Kaisy O, Palmisani S, Pang D, Smith T, Padfield N, Harris S, Markham K, Wesley S, Yearwood T. Cascade programming for 10 kHz spinal cord stimulation: a single center case series of 114 patients with neuropathic back and leg pain. Neuromodulation 2020 epub [PubMed Full Text](#)
3. Al-Kaisy A, Royds J, Al-Kaisy O, Palmisani S, Pang D, Smith T, Padfield N, Harris S, Wesley S, Yearwood TL, Ward S. Explant rates of electrical neuromodulation devices in 1177 patients in a single center over an 11-year period. Reg Anesth Pain Med 2020 epub rapm-2020-101681 [PubMed](#)
4. Antonovich DD, Gama W, Ritter A, Wolf BJ, Nobles RH, Selassie MA, Hillegass MG. Reoperation rates of percutaneous and paddle leads in spinal cord stimulator systems: a single-center retrospective analysis. Pain Med 2020 pnaa215 [PubMed](#)
5. Baranidharan G, Bretherton B, Kay T, Marsh N, Romanis C, Roberts B. BurstDR spinal cord stimulation in the treatment of chronic visceral pain. Pain Manag 2020 10(5):319-329 [PubMed](#)

6. Billot M, Naiditch N, Brandet C, Lorgeoux B, Baron S, Ounajim A, Roulaud M, Roy-Moreau A, de Montgazon G, Charrier E, Misbert L, Maillard B, Vendeuvre T, Rigoard P. Comparison of conventional, burst and high-frequency spinal cord stimulation on pain relief in refractory failed back surgery syndrome patients: study protocol for a prospective randomized double-blinded cross-over trial (MULTIWAVE study). *Trials* 2020 21(1):696 [PubMed](#) [Free Full Text](#)
7. D'Souza RS, Hagedorn JM. Anticoagulation use during dorsal column spinal cord stimulation trial. *Pain Med* 2020 pnaa244 [PubMed](#)
8. Duan W, Huang Q, Yang F, He SQ, Guan Y. Spinal cord stimulation attenuates below-level mechanical hypersensitivity in rats after thoracic spinal cord injury. *Neuromodulation* 2020 epub [PubMed](#) [Full Text](#)
9. Galan V, Scowcroft J, Chang P, Li S, Staats P, Rotte A, Subbaroyan J. 10-kHz spinal cord stimulation treatment for painful diabetic neuropathy: results from *post-hoc* analysis of the SENZA-PPN study. *Pain Manag* 2020 10(5):291-300 [PubMed](#) [Free Full Text](#)
10. Hoydonckx Y, Kumar P, Chin KJ, Bhatia A. Thoracolumbar interfascial plane block for spinal cord stimulator system implantation: a case series. *A A Pract* 2020 14(6):e01207 [PubMed](#)
11. North RB, Konrad PE, Judy JW, Ries AJ, Stevenson R. Examining the need to standardize implanted stimulator connectors: NANS survey results. *Neuromodulation* 2020 epub [PubMed](#) [Full Text](#)
12. Staudt MD, Patel S, Hellman A, Platanitis K, DiMarzio M, Khazen O, Argoff CE, Sukul VV, Pilitsis JG. Efficacy of simultaneous usage of spinal cord stimulation and intrathecal therapy for non-malignant chronic neuropathic pain. *World Neurosurg* 2020 epub [PubMed](#)
13. Steadman CJ, Grill WM. Spinal cord stimulation for the restoration of bladder function after spinal cord injury. *Healthc Technol Lett* 2020 7(3):87-92 [PubMed](#) [Free Full Text](#)
14. Sysoev Y, Bazhenova E, Lyakhovetskii V, Kovalev G, Shkorbatova P, Islamova R, Pavlova N, Gorskii O, Merkulyeva N, Shkarupa D, Musienko P. Site-specific neuromodulation of detrusor and external urethral sphincter by epidural spinal cord stimulation. *Front Syst Neurosci* 2020 epub 14:47 [PubMed](#) [Free Full Text](#)
15. Taylor RS, Bentley A, Campbell B, Murphy K. High-frequency 10-kHz spinal cord stimulation for chronic back and leg pain: cost-consequence and cost-effectiveness analyses. *Clin J Pain* 2020 epub [PubMed](#) [Free Full Text](#)
16. Wandner LD, Fenton BT, Goulet JL, Carroll CM, Heapy A, Higgins DM, Bair MJ, Sandbrink F, Kerns RD. Treatment of a large cohort of veterans experiencing musculoskeletal disorders with spinal cord stimulation in the Veterans Health Administration: veteran characteristics and outcomes. *J Pain Res* 2020 13:1687-1697 [PubMed](#) [Free Full Text](#)
17. Xu W, Zhang C, Sun B, Li D. Sustainable effects of 8-year intermittent spinal cord stimulation in a patient with thalamic post-stroke pain. *World Neurosurg* 2020 epub [PubMed](#)

SNS

1. Agnello M, Vottero M, Bertapelle P. Sacral neuromodulation to treat voiding dysfunction in patients with previous pelvic surgery for deep infiltrating endometriosis: our centre's experience. *Int Urogynecol J* 2020 epub [PubMed](#) [Free Full Text](#)
2. Chan G, Qu LG, Gani J. Evaluation of pre-operative bladder contractility as a predictor of improved response rate to a staged trial of sacral neuromodulation in patients with detrusor underactivity. *World J Urol* 2020 epub [PubMed](#)
3. Gevelinger MM, Jaworski EM, Speranza JR, Sanderson DJ. Improvements in self-reported depression following treatment of fecal incontinence with sacral neuromodulation. *Neuromodulation* 2020 epub [PubMed](#) [Full Text](#)
4. Hidaka J, Lundby L, Laurberg S, Duelund-Jakobsen J. Comparison of long-term outcome of sacral nerve stimulation for constipation and faecal incontinence with focus on explantation rate,

- additional visits, and patient satisfaction. *Tech Coloproctol* 2020 epub [PubMed](#)
5. Kollmann CT, Pretzsch EB, Kunz A, Isbert C, Krajinovic K, Reibetanz J, Kim M. Anorectal angle at rest predicting successful sacral nerve stimulation in idiopathic fecal incontinence-a cohort analysis. *Int J Colorectal Dis* 2020 epub [PubMed Free Full Text](#)
 6. Kraus SR, Shiozawa A, Szabo SM, Qian C, Rogula B, Hairston J. Treatment patterns and costs among patients with OAB treated with combination oral therapy, sacral nerve stimulation, percutaneous tibial nerve stimulation, or onabotulinumtoxinA in the United States. *Neurorol Urodyn* 2020 epub [PubMed Free Full Text](#)
 7. Sudol NT, Guaderrama N, Adams-Piper E, Whitcomb E, Lane F. Percutaneous tibial nerve stimulation for the treatment of interstitial cystitis/bladder pain syndrome: a pilot study. *Int Urogynecol J* 2020 epub [PubMed](#)
 8. Wagner L, Alonso S, Le Normand L, Faix A, Kabani S, Castelli C, Gamé X, Cornu JN, Bey E. Unilateral versus bilateral sacral neuromodulation test in the treatment of refractory idiopathic overactive bladder: a randomized controlled pilot trial. *Neurorol Urodyn* 2020 epub [PubMed](#)

Most clicked links from the August newsletter

1. Ågren R, Bartek J Jr, Johansson A, Blomstedt P, Fytagoridis A. Pulse width and implantable pulse generator longevity in pallidal deep brain stimulation for dystonia: a population-based comparative effectiveness study. *Stereotact Funct Neurosurg* 2020 epub 1-6 [PubMed](#)
2. Baek C, Kim S, Jang JW, Jung Y, Choi GJ, Shim S, Yun S, Seo K, Song YK, Kim SJ, Seo JM. Investigation of stereotactic surgery for avian brain stimulation by a fully implanted wireless system. *Neurosurg Focus* 2020 49(1):E10 [PubMed Free Full Text](#)
3. Béreau M, Kibleur A, Bouthour W, Tomkova Chaoui E, Maling N, Nguyen TAK, Momjian S, Vargas Gomez MI, Zacharia A, Bally JF, Fleury V, Tatu L, Burkhard PR, Krack P. Modeling of electric fields in individual imaging atlas for capsular threshold prediction of deep brain stimulation in Parkinson's disease: a pilot study. *Front Neurol* 2020 11:532 [PubMed Free Full Text](#)
4. Bledsoe IO, Dodenhoff KA, San Luciano M, Volz MM, Starr PA, Markun LC, Ostrem JL. Phenomenology and management of subthalamic stimulation-induced dyskinesia in patients with isolated dystonia. *Mov Disord Clin Pract* 2020 7(5):548-551 [PubMed](#)
5. Bove F, Fraix V, Cavallieri F, Schmitt E, Lhommée E, Bichon A, Meoni S, Pélissier P, Kistner A, Chevrier E, Ardouin C, Limousin P, Krack P, Benabid AL, Chabardès S, Seigneuret E, Castríoto A, Moro E. Dementia and subthalamic deep brain stimulation in Parkinson disease: a long-term overview. *Neurology* 2020 95(4):e384-e392 [PubMed](#)
6. Bruno S, Nikolov P, Hartmann CJ, Trenado C, Slotty PJ, Vesper J, Schnitzler A, Groiss SJ. Directional deep brain stimulation of the thalamic ventral intermediate area for essential tremor increases therapeutic window. *Neuromodulation* 2020 epub [PubMed Full Text](#)
7. Butenko K, Bahls C, Schröder M, Köhling R, van Rienen U. OSS-DBS: Open-source simulation platform for deep brain stimulation with a comprehensive automated modeling. *PLOS Comput Biol* 2020 16(7):e1008023 [PubMed Free Full Text](#)
8. Campbell MC, Myers PS, Weigand AJ, Foster ER, Cairns NJ, Jackson JJ, Lessov- Schlaggar CN, Perlmuter JS. Parkinson disease clinical subtypes: key features & clinical milestones. *Ann Clin Transl Neurol* 2020 epub [PubMed Free Full Text](#)
9. Eldabe S, Duarte RV, Gulve A, Thomson S, Baranidharan G, Houten R, Jowett S, Sandhu H, Chadwick R, Brookes M, Kansal A, Earle J, Bell J, Robinson J, Walker S, Rhodes S, Taylor RS. Does a screening trial for spinal cord stimulation in patients with chronic pain of neuropathic origin have clinical utility and cost- effectiveness (TRIAL-STIM)? A randomised controlled trial. *Pain* 2020 epub [PubMed](#) Free version accessed through PubMed.
10. Grabnar M, Kim C. Dorsal root ganglion stimulation for treatment of chemotherapy-induced neuropathy: a case report. *Am J Phys Med Rehabil* 2020 epub [PubMed](#)

11. Harman F, Aydin S, Sencan S, Akdeniz E, Guvenc Y, Saracoglu A, Eyigor C, Uyar M, Gunduz OH. Percutaneous spinal cord stimulation for failed back surgery syndrome: a retrospective study. *Turk Neurosurg* 2020 epub [PubMed Free Full Text](#)

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