



September 2021 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.

A SOLUTION FOR A PUBLICATION PET PEEVE

For many years, Dr. North (among many others, we presume) has been frustrated by the variety and inconsistency of disclosure forms required by journals and scientific conferences. Not only is this variety time consuming, it invites error and misunderstanding, working against the goal of improving public trust. It often seems that those who created these forms applied neither rhyme nor reason to their efforts.

In discussions among ourselves, we envisioned a repository of disclosures hosted online by an appropriate entity (one with a larger focus than that of our small Foundation). To bring this proposal to fruition will first involve creating a data entry form broad enough to capture all potential conflicts of interest yet detailed enough to satisfy the requirements of specialized journals and meeting organizers. This task is not as straightforward as it might seem: a recent ICJME proposal for such a form (Taichman et al. [PubMed](#)) has garnered criticism (Shaw [PubMed](#)) that we trust will be useful.

Once a standard form is created, we suggest something new—the host organization will maintain completed disclosure forms in an online database, to be updated by authors as needed. This repository will be independent; instead of being sponsored by a specific journal or meeting sponsor, it will be used by all. Each journal and meeting, however, can have its own preferred format in which a disclosure will be downloaded (with the author's permission) for publication. For example, one journal might want every potential conflict of interest throughout a 50-year career disclosed; another might limit the time frame.

In coming weeks, we plan to prepare a questionnaire that will allow the members of our profession to indicate how they feel about this proposal and to weigh in on what a comprehensive disclosure form should include. As always, we invite our readers to respond to this newsletter with any questions or suggestions.

WELCOME TO DR. TODD SITZMAN

The Neuromodulation Foundation is pleased to welcome Dr. Todd Sitzman to our board. Dr. Sitzman has been an enthusiastic supporter of WIKISTIM from the time the website was a gleam in our eyes, has been our only at-large editor since 2014, and has generously donated annually to support WIKISTIM. Dr. Sitzman is likely known to most of our readers as the past-president of the North American Neuromodulation Society. He is medical director of a

comprehensive pain clinic in Hattiesburg, Mississippi, active in research, and unstinting in his service to our community.

THANK YOU TO THE DONLIN & HARRIETT LONG FAMILY CHARITABLE GIFT FUND

Dr. Donlin Long is a legend in the field of neurostimulation. In his role as head of the Department of Neurosurgery at Johns Hopkins Hospital, he was a pioneer of spinal cord stimulation and served as mentor to Dr. North. Dr. Long is a founding board member of The Neuromodulation Foundation, which we created in October 2007. Like Dr. Sitzman, Dr. Long immediately saw the potential in WIKISTIM, and he and his family have underscored his enthusiasm with donations in the past and again in the past month.

A NOTE ON FULL TEXT LINKS

This month, we have clarified which full-text links are paywall protected. We provide these links as a courtesy only for “our” journal, [Neuromodulation](#). All other full-text links are “Free Full Text” (including, of course, open-access papers published in *Neuromodulation*). We have noticed in the past that some papers are only free in their “accepted proof” stage. We don’t label these differently but urge our readers to download any free article of interest without delay. Occasionally, the link to a PDF downloads immediately or has a “watermark,” which means the link can’t be shared. In those cases, we provide the link to the link. We hope you find our efforts a time-saving and useful way to remain current with the literature and build your libraries

MEMBERSHIP

In August, the number of our subscribers grew to 1516. Thank you for helping to spread the word!

CITATIONS ADDED FROM SEARCH ON AUGUST 26, 2021

Deep Brain Stimulation (now 6430 citations)

1. Ahmadipour M, Barkhordari-Yazdi M, Seydnejad SR. **Subspace-based predictive control of Parkinson's disease: a model-based study**. *Neural Netw* 2021 142:680-689 [PubMed](#)
2. Avena A, Arlotti M, Rosa M, Chabardès S, Seigneuret E, Priori A, Moro E, Meoni S. **Pallidal and cortical oscillations in freely moving patients with dystonia**. *Neuromodulation* 2021 epub [PubMed Full Text Behind Paywall](#)
3. Bernardinis M, Atashzar SF, Patel RV, Jog MS. **Abnormal vision-based displacement perception in Parkinson's disease**. *Front Neurosci* 2021 15:676469 [PubMed Free Full Text](#)
4. Boura I, Haliasos N, Giannopoulou IA, Karabetsos D, Spanaki C. **Combining device-aided therapies in Parkinson's disease: a case series and a literature review**. *Mov Disord Clin Pract* 2021 8(5):750-757 [PubMed](#)
5. Britz JPE, Franceschini PR, Ramos MB, de Aguiar PHP, Farah JO, de Aguiar PHP. **Skin erosion in deep brain stimulation procedures: using the temporalis muscle to treat this complication - a technical note**. *Surg Neurol Int* 2021 12:355 [PubMed Free Full Text](#)
6. Campbell BA, Cho H, Faulhammer RM, Hogue O, Tsai JP, Hussain MS, Machado AG, Baker KB. **Stability and effect of parkinsonian state on deep brain stimulation cortical evoked potentials**. *Neuromodulation* 2021 epub [PubMed Full Text Behind Paywall](#)

7. Chen W, Wang M, Wang N, Du C, Ma X, Li Q. **The impacts of subthalamic nucleus-deep brain stimulation (STN-DBS) on the neuropsychiatric function of patients with Parkinson's disease using image features of magnetic resonance imaging under the artificial intelligence algorithms.** Contrast Media Mol Imaging 2021 2021:9915206 [PubMed](#) [Free Full Text](#)
8. Chou P, Kuo CC. **Anticonvulsant vs. proconvulsant effect of *in situ* deep brain stimulation at the epileptogenic focus.** Front Syst Neurosci 2021 15:607450 [PubMed](#) [Free Full Text](#)
9. Chrabaszcz A, Wang D, Lipski WJ, Bush A, Crammond DJ, Shaiman S, Dickey MW, Holt LL, Turner RS, Fiez JA, Richardson RM. **Simultaneously recorded subthalamic and cortical LFPs reveal different lexicality effects during reading aloud.** J Neurolinguistics 2021 60:101019 [PubMed](#)
10. Contreras Lopez WO, Navarro PA, Gouveia FV, Fonoff ET, Lebrun I, Auada AVV, Lopes Alho EJ, Martinez RCR. **Directional deep brain stimulation of the posteromedial hypothalamus for refractory intermittent explosive disorder: a case series using a novel neurostimulation device and intraoperative microdialysis.** World Neurosurg 2021 epub [PubMed](#)
11. Conway ZJ, Silburn PA, Perera T, O'Maley K, Cole MH. **Low-frequency STN-DBS provides acute gait improvements in Parkinson's disease: a double-blinded randomised cross-over feasibility trial.** J Neuroeng Rehabil 2021 18(1):125 [PubMed](#) [Free Full Text](#)
12. Doummar D, Treven M, Qebibo L, Devos D, Ghomid J, Ravelli C, Kranz G, Krenn M, Demailly D, Cif L, Davion JB, Zimprich F, Burglen L, Zech M. **Childhood-onset progressive dystonia associated with pathogenic truncating variants in CHD8.** Ann Clin Transl Neurol 2021 epub [PubMed](#) [Free Full Text](#)
13. Elias GJB, Germann J, Boutet A, Pancholi A, Beyn ME, Bhatia K, Neudorfer C, Loh A, Rizvi SJ, Bhat V, Giacobbe P, Woodside DB, Kennedy SH, Lozano AM. **Structuro-functional surrogates of response to subcallosal cingulate deep brain stimulation for depression.** Brain 2021 awab284 [PubMed](#)
14. Evans A, Fung VSC, O'Sullivan JD, Stell R, White R, Williams DR, Femia S, Onuk K. **Characteristics of advanced Parkinson's disease patients seen in movement disorder clinics - Australian results from the cross-sectional OBSERVE study.** Clin Park Relat Disord 2020 4:100075 [PubMed](#) [Free Full Text](#)
15. Evidente VGH, Rokhlin P, Evidente MH, Lambert M, Garrett R, Ponce FA. **Thalamic deep brain stimulation is effective in alleviating craniocervical dystonia.** Mov Disord Clin Pract 2021 8(5):778-781 [PubMed](#)
16. Fasano A, Gorodetsky C, Paul D, Germann J, Loh A, Yan H, Carlen PL, Breitbart S, Lozano AM, Ibrahim GM, Kalia SK. **Local field potential-based programming: a proof-of-concept pilot study.** Neuromodulation 2021 epub [PubMed](#) [Full Text Behind Paywall](#)
17. Gouveia FV, Germann J, Elias GJ, Hamani C, Fonoff ET, Martinez RCR. **5 years follow-up on posterior hypothalamus deep brain stimulation for intractable aggressive behaviour associated with drug-resistant epilepsy.** Brain Stimul 2021 14(5):1201-1204 [PubMed](#) [Free Full Text](#)
18. Gregg NM, Marks VS, Sladky V, Lundstrom BN, Klassen B, Messina SA, Brinkmann BH, Miller KJ, Van Gompel JJ, Kremen V, Worrell GA. **Anterior nucleus of the thalamus seizure detection in ambulatory humans.** Epilepsia 2021 epub [PubMed](#)

19. Guang J, Baker H, Ben-Yishay Nizri O, Firman S, Werner-Reiss U, Kapuller V, Israel Z, Bergman H. **Toward asleep DBS: cortico-basal ganglia spectral and coherence activity during interleaved propofol/ketamine sedation mimics NREM/REM sleep activity.** NPJ Parkinsons Dis 2021 7(1):67 [PubMed Free Full Text](#)
20. Insola A, Mazzone P, Della Marca G, Capozzo A, Vitale F, Scarnati E. **Pedunculopontine tegmental nucleus-evoked prepulse inhibition of the blink reflex in Parkinson's disease.** Clin Neurophysiol 2021 epub [PubMed](#)
21. Jiang L, Chen W, Guo Q, Yang C, Gu J, Xian W, Liu Y, Zheng Y, Ye J, Xu S, Hu Y, Wu L, Chen J, Qian H, Fu X, Liu J, Chen L. **Eight-year follow-up outcome of subthalamic deep brain stimulation for Parkinson's disease: maintenance of therapeutic efficacy with a relatively low levodopa dosage and stimulation intensity.** CNS Neurosci Ther 2021 epub [PubMed Free Full Text](#)
22. Johnson V, Wilt R, Gilron R, Anso J, Perrone R, Beudel M, Piña-Fuentes D, Saal J, Ostrem JL, Bledsoe I, Starr P, Little S. **Embedded adaptive deep brain stimulation for cervical dystonia controlled by motor cortex theta oscillations.** Exp Neurol 2021 345:113825 [PubMed](#)
23. Kale RP, Nguyen TTL, Price JB, Yates NJ, Walder K, Berk M, Sillitoe RV, Kouzani AZ, Tye SJ. **Mood regulatory actions of active and sham nucleus accumbens deep brain stimulation in antidepressant resistant rats.** Front Hum Neurosci 2021 15:644921 [PubMed Free Full Text](#)
24. Kortz MW, Kongs BM, McCray E, Grassia F, Hosokawa P, Bernstein JE, Moore SP, Yanovskaya M, Ojemann SG. **How neuropsychiatric comorbidity, modulatory indication, demographics, and other factors impact deep brain stimulation inpatient outcomes in the United States: a population-based study of 27,956 patients.** Clin Neurol Neurosurg 2021 208:106842 [PubMed](#)
25. Lazcano-Ocampo C, van Wamelen D, Samuel M, Silverdale M, Rizos A, Sauerbier A, Koch J, Podlowska A, Leta V, Dafsari HS, Timmermann L, Ashkan K, Ray Chaudhuri K. **Evaluation of the effect of bilateral subthalamic nucleus deep brain stimulation on fatigue in Parkinson's disease as measured by the non-motor symptoms scale.** Br J Neurosurg 2021 epub:1-4 [PubMed](#)
26. Ledda C, Artusi CA, Montanaro E, Martone T, Zibetti M, Lopiano L. **G325R GBA mutation in Parkinson's disease: disease course and long-term DBS outcome.** Brain Stimul 2021 14(5):1169-1171 [PubMed Free Full Text](#)
27. Lee SH, Kim MS, Hwang YS, Jo S, Park KW, Jeon SR, Chung SJ. **Clinical implication of stimulation-induced dyskinesia in globus pallidus deep brain stimulation for advanced Parkinson's disease.** J Neurol Neurosurg Psychiatry 2021 jnnp-2020-326015 [PubMed Free Full Text](#)
28. Li Z, Ren G, Liu C, Wang Q, Liang K, Han C, Qiao H, Zhang J, Wang Q, Meng F. **Dysfunctional brain dynamics of Parkinson's disease and the effect of acute deep brain stimulation.** Front Neurosci 2021 15:697909 [PubMed Free Full Text](#)
29. Lilach S, Hagai B, Zvi I, Hermona S, Wael M. **MicroRNA expression changes in Parkinson's disease (PD) patients' leukocytes prior to and following deep brain stimulation (DBS).** Am J Neurodegener Dis 2021 10(3):28-33 [PubMed Free Full Text](#)
30. Lin Z, Zhang C, Sun B, Li D. **Subthalamic stimulation changes motor laterality in Parkinson's disease.** Clin Park Relat Disord 2020 3:100081 [PubMed Free Full Text](#)

31. Loftus AM, Nielsen C, Corti EJ, Starkstein S, Gasson N, Egan SJ. **Measuring general expectations of advanced stage treatment outcomes in Parkinson's disease.** J Parkinsons Dis 2021 epub [PubMed](#)
32. Luo B, Lu Y, Qiu C, Dong W, Xue C, Zhang L, Liu W, Zhang W. **Altered spontaneous neural activity and functional connectivity in Parkinson's disease with subthalamic microlesion.** Front Neurosci 2021 15:699010 [PubMed](#) [Free Full Text](#)
33. Maciel R, Soh D, Munhoz RP, Poon YY, Kalia SK, Hodaie M, Lozano AM, Fasano A. **Programming directional deep brain stimulation in Parkinson's disease: a randomized prospective trial comparing early versus delayed stimulation steering.** Stereotact Funct Neurosurg 2021 epub:1-7 [PubMed](#) [Free Full Text](#)
34. Makarov SN, Golestanirad L, Wartman WA, Nguyen BT, Noetscher GM, Ahveninen JP, Fujimoto K, Weise K, Nummenmaa AR. **Boundary element fast multipole method for modeling electrical brain stimulation with voltage and current electrodes.** J Neural Eng 2021 18(4) [PubMed](#)
35. Martin RA, Cukiert A, Blumenfeld H. **Short-term changes in cortical physiological arousal measured by electroencephalography during thalamic centromedian deep brain stimulation.** Epilepsia 2021 epub [PubMed](#)
36. Middlebrooks EH, Okromelidze L, Carter RE, Jain A, Lin C, Westerhold E, Peña AB, Quiñones-Hinojosa A, Uitti RJ, Grewal SS. **Directed stimulation of the dentato-rubro-thalamic tract for deep brain stimulation in essential tremor: a blinded clinical trial.** Neuroradiol J 2021 epub [PubMed](#)
37. Morishita T, Sakai Y, Iida H, Yoshimura S, Ishii A, Fujioka S, Tanaka SC, Inoue T. **Neuroanatomical considerations for optimizing thalamic deep brain stimulation in Tourette syndrome.** J Neurosurg 2021 epub:1-11 [PubMed](#) [Free Full Text](#)
38. Morishita T, Sakai Y, Mishima T, Umemoto G, Okun MS, Tanaka SC, Tsuboi Y, Inoue T. **GPI DBS for non-parkinsonian midline tremor: a normative connectomic comparison to a failed thalamic DBS.** Front Hum Neurosci 2021 15:709552 [PubMed](#) [Free Full Text](#)
39. Namdev V, Haneef G, Khan AT, Basith SA, Virani A, Canenguez Benitez JS, Sejdiu A, Mathialagan K, Majumder P. **Psychiatric comorbidities affect the hospitalization course of parkinson's disease patients: a cross-sectional inpatient study.** Cureus 2021 13(7):e16255 [PubMed](#) [Free Full Text](#)
40. Negrini-Ferrari SE, Medeiros P, Malvestio RB, de Oliveira Silva M, Medeiros AC, Coimbra NC, Machado HR, de Freitas RL. **The primary motor cortex electrical and chemical stimulation attenuates the chronic neuropathic pain by activation of the periaqueductal grey matter: the role of NMDA receptors.** Behav Brain Res 2021 415:113522 [PubMed](#)
41. Onofri M, Di Iorio A, Carrarini C, Russo M, Franciotti R, Espay AJ, Boylan LS, Taylor JP, Di Giannantonio M, Martinotti G, Valente EM, Thomas A, Bonanni L, Delli Pizzi S, Dono F, Sensi S. **Preexisting bipolar disorder influences the subsequent phenotype of Parkinson's disease.** Mov Disord 2021 epub [PubMed](#)
42. Pal Attia T, Crepeau D, Kremen V, Nasser M, Guragain H, Steele SW, Sladky V, Nejedly P, Mivalt F, Herron JA, Stead M, Denison T, Worrell GA, Brinkmann BH. **Epilepsy personal assistant device-a mobile platform for brain state, dense behavioral and physiology tracking and controlling adaptive stimulation.** Front Neurol 2021 12:704170 [PubMed](#) [Free Full Text](#)

43. Parisi V, Lundstrom BN, Kerezoudis P, Alcalá Zermeno JL, Worrell GA, Van Gompel JJ. **Anterior nucleus of the thalamus deep brain stimulation with concomitant vagus nerve stimulation for drug-resistant epilepsy.** Neurosurgery 2021 nyab253 [PubMed](#)
44. Passamonti C, Mancini F, Cesaroni E, Bonifazi S, Ceravolo MG, Capecci M, Zamponi N, Scerrati M, Ricciuti RA. **Deep brain stimulation in patients with long history of drug resistant epilepsy and poor functional status: outcomes based on the different targets.** Clin Neurol Neurosurg 2021 208:106827 [PubMed](#)
45. Provenza NR, Gelin LFF, Mahaphanit W, McGrath MC, Dastin-van Rijn EM, Fan Y, Dhar R, Frank MJ, Restrepo MI, Goodman WK, Borton DA. **Honeycomb: a template for reproducible psychophysiological tasks for clinic, laboratory, and home use.** Braz J Psychiatry 2021 epub [PubMed](#) [Free Full Text](#)
46. Radmard S, Ortega RA, Ford B, Vanegas-Aroyave N, McKhann GM 2nd, Sheth SA, Winfield L, Luciano MS, Saunders-Pullman R, Pullman SL. **Using computerized spiral analysis to evaluate deep brain stimulation outcomes in Parkinson disease.** Clin Neurol Neurosurg 2021 208:106878 [PubMed](#)
47. Ramesh V, Rehbock C, Giera B, Karnes JJ, Forien JB, Angelov SD, Schwabe K, Krauss JK, Barcikowski S. **Comparing direct and pulsed-direct current electrophoretic deposition on neural electrodes: deposition mechanism and functional influence.** Langmuir 2021 epub [PubMed](#)
48. Rügge D, Mahendran S, Stieglitz LH, Oertel MF, Gassert R, Lambercy O, Baumann CR, Imbach LL. **Tremor analysis with wearable sensors correlates with outcome after thalamic deep brain stimulation.** Clin Park Relat Disord 2020 3:100066 [PubMed](#) [Free Full Text](#)
49. Runge J, Cassini Ascencao L, Blahak C, Kinfe TM, Schrader C, Wolf ME, Saryyeva A, Krauss JK. **Deep brain stimulation in patients on chronic antiplatelet or anticoagulation treatment.** Acta Neurochir (Wien) 2021 epub [PubMed](#) [Free Full Text](#)
50. Salari M, Etemadifar M, Zali A, Aminzade Z, Navalpotro-Gomez I, Fateh ST. **Covid-19 in Parkinson's disease treated by drugs or brain stimulation. Spanish.** Neurologia 2021 epub [PubMed](#) [Free Full Text](#)
51. Segar DJ, Tata N, Harary M, Hayes MT, Cosgrove GR. **Asleep deep brain stimulation with intraoperative magnetic resonance guidance: a single-institution experience.** J Neurosurg 2021 epub:1-10 [PubMed](#)
52. Stenmark Persson R, Nordin T, Hariz GM, Wårdell K, Forsgren L, Hariz M, Blomstedt P. **Deep brain stimulation of caudal zona incerta for Parkinson's disease: one-year follow-up and electric field simulations.** Neuromodulation 2021 epub [PubMed](#) [Free Full Text](#)
53. Sun Y, Wang Z, Hu K, Mo Y, Cao P, Hou X, He X, Zhang S, Xue S. **α and θ oscillations in the subthalamic nucleus are potential biomarkers for Parkinson's disease with depressive symptoms.** Parkinsonism Relat Disord 2021 90:98-104 [PubMed](#)
54. Thenaisie Y, Palmisano C, Canessa A, Keulen BJ, Capetian P, Castro Jiménez M, Bally JF, Manferlotti E, Beccaria L, Zutt R, Courtine G, Bloch J, van der Gaag NA, Hoffmann CF, Martin Moraud E, Isaias IU, Contarino MF. **Towards adaptive deep brain stimulation: clinical and technical notes on a novel commercial device for chronic brain sensing.** J Neural Eng 2021 epub [PubMed](#) [Free Full Text](#)

55. Torres CV, Treu S, Strange B, Lara M, Navas M, Ezquiaga E, Zazo ES, Vicente JS, Muñiz I, Fernandez FS. **Deep brain stimulation of the nucleus accumbens, ventral striatum or internal capsule targets for medication resistant obsessive compulsive disorder: a multicentric study.** World Neurosurg 2021 epub [PubMed](#)
56. Umakoshi M, Yasuhara T, Morimoto J, Murai S, Sasaki T, Kameda M, Kin K, Miyoshi Y, Date I. **Spinal surgery after bilateral subthalamic stimulation for patients with Parkinson's disease: a retrospective outcome analysis of pain and functional control.** Neurol Med Chir (Tokyo) 2021 epub [PubMed](#) [Free Full Text](#)
57. Vijiaratnam N, Girges C, Wirth T, Grover T, Preda F, Tripoliti E, Foley J, Scelzo E, Macerollo A, Akram H, Hyam J, Zrinzo L, Limousin P, Foltynie T. **Long-term success of low-frequency subthalamic nucleus stimulation for Parkinson's disease depends on tremor severity and symptom duration.** Brain Commun 2021 3(3):fcab165 [PubMed](#) [Free Full Text](#)
58. Vila-Merkle H, González-Martínez A, Campos-Jiménez R, Martínez-Ricós J, Teruel-Martí V, Blasco-Serra A, Lloret A, Celada P, Cervera-Ferri A. **The oscillatory profile induced by the anxiogenic drug FG-7142 in the amygdala-hippocampal network is reversed by infralimbic deep brain stimulation: relevance for mood disorders.** Biomedicines 2021 9(7):783 [PubMed](#) [Free Full Text](#)
59. Waldthaler J, Bopp M, Kühn N, Bacara B, Keuler M, Gjorgjevski M, Carl B, Timmermann L, Nimsky C, Pedrosa DJ. **Imaging-based programming of subthalamic nucleus deep brain stimulation in Parkinson's disease.** Brain Stimul 2021 14(5):1109-1117 [PubMed](#) [Free Full Text](#)
60. Wang Y, Gao P, Zhang X, Lv B, Xu Z, Cheng H. **Bilateral subthalamic nucleus deep brain stimulation improves gastric emptying time in Parkinson disease.** World Neurosurg 2021 epub [PubMed](#)
61. Wang Y, Luo H, Chen Y, Jiao Z, Sun Q, Dong L, Chen X, Wang X, Zhang H. **A closed-loop neuromodulation chipset with 2-level classification achieving 1.5-Vpp CM interference tolerance, 35-dB stimulation artifact rejection in 0.5ms and 97.8%-sensitivity seizure detection.** IEEE Trans Biomed Circuits Syst 2021 epub [PubMed](#)
62. Weerasinghe G, Duchet B, Bick C, Bogacz R. **Optimal closed-loop deep brain stimulation using multiple independently controlled contacts.** PLOS Comput Biol 2021 17(8):e1009281 [PubMed](#) [Free Full Text](#)
63. Wolf ME, Blahak C, Schrader C, Krauss JK. **Longterm improvement after cessation of chronic deep brain stimulation in acquired dystonia.** Tremor Other Hyperkinet Mov (NY) 2021 11:29 [PubMed](#) [Free Full Text](#)
64. Zhang C, Lai Y, Li J, He N, Liu Y, Li Y, Li H, Wei H, Yan F, Horn A, Li D, Sun B. **Subthalamic and pallidal stimulations in patients with Parkinson's disease: common and dissociable connections.** Ann Neurol 2021 epub [PubMed](#) [Free Full Text](#)
65. Zhang Q, Thomsen TR. **Deep brain stimulation targeting the globus pallidus internus for Parkinson's disease and Tourette syndrome.** Clin Park Relat Disord 2020 3:100077 [PubMed](#) [Free Full Text](#)
66. Zhu Z, Hubbard E, Guo X, Barbosa DAN, Popal AM, Cai C, Jiang H, Zheng Z, Lin J, Gao W, Zhang J, Bartas K, Macchia D, Derdeyn P, Halpern CH, Mayberg HS, Beier KT, Zhu J, Wu H. **A connectomic analysis of deep brain stimulation for treatment-resistant depression.** Brain Stimul 2021 14(5):1226-1233 [PubMed](#) [Free Full Text](#)

Dorsal Root Ganglion Stimulation (now 204 citations, with 9 completed WIKISTIM abstracts)

1. Chapman KB, Spiegel MA, Dickerson DM, Billet B, Patel KV, Hunter C, Antony A, van Helmond N, Deer T, Kallewaard JW, Hagedorn JM, Yang A. **A paramedian approach for dorsal root ganglion stimulation placement developed to limit lead migration and fracture.** Pain Pract 2021 epub [PubMed](#)
2. Hines K, Swaminathan V, Thalheimer S, Kogan M, Wu C, Sharan A. **Single-center retrospective analysis of device-related complications related to dorsal root ganglion stimulation for pain relief in 31 patients.** Neuromodulation 2021 epub [PubMed](#) [Full Text Behind Paywall](#)
3. Kretzschmar M, Reining M. **Dorsal root ganglion stimulation for treatment of central post-stroke pain in the lower extremity following medullary infarction.** Pain 2021 epub [PubMed](#)
4. Reining M, Winkler D, Boettcher J, Meixensberger J, Kretzschmar M. **Magnetic resonance imaging (MRI) scans in patients with dorsal root ganglion stimulation.** Pain Pract 2021 epub [PubMed](#)

Gastric Electrical Stimulation (now 512 citations)

1. Perley A, Roustaei M, Aguilar-Rivera M, Kunkel DC, Hsiai TK, Coleman TP, Abiri P. **Miniaturized wireless gastric pacing via inductive power transfer with non-invasive monitoring using cutaneous electrogastrigraphy.** Bioelectron Med 2021 7(1):12 [PubMed](#) [Free Full Text](#)
2. Saleem S, Hussain A, Alsamman MA, Inayat F, Kaler J, Tansel A, Thomas AL. **Characteristics of patients who underwent gastric electrical stimulation vs. surgical pyloric interventions for refractory gastroparesis.** Saudi J Gastroenterol 2021 epub [PubMed](#)

Peripheral Nerve Stimulation (now 572 citations, with 6 completed WIKISTIM abstracts)

1. Amorizzo E, Colini-Baldeschi G. **Peripheral nerve stimulation: two cases of intractable neuropathic pain.** Anesth Pain Med 2021 11(2):e113162 [PubMed](#) [Free Full Text](#)
2. Bucksot JE, Chandler CR, Intharuck NM, Rennaker RL, Kilgard MP, Hays SA. **Validation of a parameterized, open-source model of nerve stimulation.** J Neural Eng 2021 18(4) [PubMed](#)
3. De Andres J, Formicola GL, Rubio-Haro R, De Andres-Serrano C. **Updated management of occipital nerve stimulator lead migration: case report of a technical challenge.** Scand J Pain 2021 21(2):415-420 [PubMed](#)
4. Hajjabadi MM, Jakobs M, Unterberg A, Ahmadi R. **Wireless subcutaneous trigeminal nerve field stimulation for refractory trigeminal pain: a single center experience.** Neuromodulation 2021 epub [PubMed](#) [Free Full Text](#)
5. Ilfeld BM, Plunkett A, Vijjeswarapu AM, Hackworth R, Dhanjal S, Turan A, Cohen SP, Eisenach JC, Griffith S, Hanling S, Sessler DI, Mascha EJ, Han Y, Boggs JW, Wongsarnpigoon A, Gelfand H; PAINfRE Investigators. **Percutaneous neuromodulation of the brachial plexus and sciatic nerve for the treatment of acute pain following surgery:**

secondary outcomes from a multicenter, randomized, controlled pilot study. Neuromodulation 2021 epub [PubMed Full Text Behind Paywall](#)

6. Jiang D, Liu F, Lancashire HT, Perkins TA, Schormans M, Vanhoestenbergh A, Donaldson NN, Demosthenous A. **A versatile hermetically sealed microelectronic implant for peripheral nerve stimulation applications.** Front Neurosci 2021 15:681021 [PubMed](#) [Free Full Text](#)
7. Uppal P, Wright TB, Dahbour L, Watterworth B, Lee SJ, Gattu K, Stansbury LG, Benoit J. **Difficult removal of exposed peripheral nerve stimulator leads: a report of 2 cases.** Pain Rep 2021 6(3):e946 [PubMed](#) [Free Full Text](#)
8. Zhao L, Song T. **Short-term spinal cord stimulation and peripheral nerve stimulation for the treatment of trigeminal postherpetic neuralgia in elderly patients.** Front Neurol 2021 12:713366 [PubMed](#) [Free Full Text](#)

Spinal Cord Stimulation (now 2770 citations, with 133 completed or partially completed WIKISTIM abstracts)

1. Baranidharan G, Bretherton B, Eldabe S, Mehta V, Thomson S, Sharma ML, Vajramani G, Bojanic S, Gulve A, FitzGerald J, Hall S, Firth J. **The impact of the COVID-19 pandemic on patients awaiting spinal cord stimulation surgery in the United Kingdom: a multi-centre patient survey.** Br J Pain 2021 15(3):282-290 [PubMed](#) [Free Full Text](#)
2. Best BJ, Porwal MH, Pahapill PA. **Preoperative thoracic spine magnetic resonance imaging for spinal cord stimulation: should such a recommendation be an absolute requirement?** Neuromodulation 2021 epub [PubMed Full Text Behind Paywall](#)
3. Bordeleau M, Léonard G, Gauthier L, Ferland CE, Backonja M, Vollert J, Marchand S, Jackson P, Cantin L, Prud'Homme M. **Classification of qualitative fieldnotes collected during quantitative sensory testing: a step towards the development of a new mixed methods approach in pain research.** J Pain Res 2021 14:2501-2511 [PubMed](#) [Free Full Text](#)
4. Cox CJ, Wilkinson MM, Erdek MA. **Successful spinal cord stimulation for chronic pancreatitis and post-laminectomy pain.** Pain Manag 2021 epub [PubMed](#)
5. Dario A, Frigerio G. **Management of intractable pain in patients with implanted spinal cord stimulation devices during the COVID-19 pandemic using a remote and wireless programming system.** Front Neurosci 2021 15:696830 [PubMed](#) [Free Full Text](#)
6. Deer T, Wilson D, Schultz D, Falowski S, Tavel E, Moore G, Heros R, Patterson D, Fahey M, Capobianco R, Anitescu M. **Ultra-low energy cycled burst spinal cord stimulation yields robust outcomes in pain, function, and affective domains: a subanalysis from two prospective, multicenter, international clinical trials.** Neuromodulation 2021 epub [PubMed Full Text Behind Paywall](#)
7. Fishman M, Corder H, Justiz R, Provenzano D, Merrell C, Shah B, Naranjo J, Kim P, Calodney A, Carlson J, Bundschu R, Sanapati M, Mangal V, Vallejo R. **12-month results from multicenter, open-label, randomized controlled clinical trial comparing differential target multiplexed spinal cord stimulation and traditional spinal cord stimulation in subjects with chronic intractable back pain and leg pain.** Pain Pract 2021 epub [PubMed](#) [Free Full Text](#)
8. Garcia-Sandoval A, Guerrero E, Hosseini SM, Rocha-Flores PE, Rihani R, Black BJ, Pal A, Carmel JB, Pancrazio JJ, Voit WE. **Stable softening bioelectronics: a paradigm for**

chronically viable ester-free neural interfaces such as spinal cord stimulation implants. *Biomaterials* 2021 277:121073 [PubMed](#)

9. Goudman L, Duarte RV, De Smedt A, Copley S, Eldabe S, Moens M. **Cross-country differences in pain medication before and after spinal cord stimulation: a pooled analysis of individual patient data from two prospective studies in the United Kingdom and Belgium.** *Neuromodulation* 2021 epub [PubMed Full Text Behind Paywall](#)
10. Hagedorn JM, Canzanello N, Bendel MA, P Pittelkow T, J Lamer T. **Antibacterial envelope use for the prevention of surgical site infection in spinal cord stimulator implantation surgery: a retrospective review of 52 cases.** *J Pain Res* 2021 14:2249-2254 [PubMed Free Full Text](#)
11. Hagedorn JM, Falowski SM, Blomme B, Capobianco RA, Yue JJ. **Burst spinal cord stimulation can attenuate pain and its affective components in chronic pain patients with high psychological distress: results from the prospective, international TRIUMPH study.** *Spine J* 2021 epub [PubMed](#)
12. Im S, Son BC. **Long-term changes in thecal sac compression and decreased cerebrospinal fluid space following paddle lead spinal cord stimulation at T9: a long-term follow-up via three-dimensional myelographic computed tomography.** *Neuromodulation* 2021 epub [PubMed Full Text Behind Paywall](#)
13. Lam CM, Zayed H, Sayed D. **High frequency dorsal column spinal cord stimulation for management of erythromelalgia.** *BMJ Case Rep* 2021 14(8):e244758 [PubMed](#)
14. Manchikanti L, Pampati V, Vangala BP, Soini A, Sanapati MR, Thota S, Hirsch JA. **Spinal cord stimulation trends of utilization and expenditures in fee-for-service (FFS) Medicare population from 2009 to 2018.** *Pain Physician* 2021 24(5):293-308 [PubMed Free Full Text](#)
15. Mao GW, Zhang JJ, Su H, Zhou ZJ, Zhu LS, Lü XY, Wang ZG. **A flexible electrode array for determining regions of motor function activated by epidural spinal cord stimulation in rats with spinal cord injury.** *Neural Regen Res* 2022 17(3):601-607 [PubMed Free Full Text](#)
16. Martens JM, Fiala K, Glover C, Zacharias N, Abd-Elsayed A. **Use of spinal cord stimulators in patients with pacemakers or implantable cardiac defibrillators: a review of documented accounts of interference.** *Neuromodulation* 2021 epub [PubMed Full Text Behind Paywall](#)
17. Niso G, Tjepkema-Cloostermans MC, Lenders MWPM, de Vos CC. **Modulation of the somatosensory evoked potential by attention and spinal cord stimulation.** *Front Neurol* 2021 12:694310 [PubMedFree Full Text](#)
18. Pilitsis JG, Chakravarthy KV, Will AJ, Trutnau KC, Hageman KN, Dinsmoor DA, Litvak LM. **The evoked compound action potential as a predictor for perception in chronic pain patients: tools for automatic spinal cord stimulator programming and control.** *Front Neurosci* 2021 15:673998 [PubMedFree Full Text](#)
19. Sencan S, Sacaklıdır R, Hakan Gunduz O. **The immediate adverse events of lumbar interventional pain procedures in 4209 patients; an observational clinical study.** *Pain Med* 2021 pnab230 [PubMed](#)
20. Thissen J, Bara GA. **Placement of surgical spinal cord stimulation (SCS) leads using spinal process splitting laminotomy (SPSL): technical note.** *World Neurosurg* 2021 epub [PubMed](#)

21. Urban LS, Thornton MA, Ingraham Dixie KL, Dale EA, Zhong H, Phelps PE, Burdick JW, Edgerton VR. **Formation of a novel supraspinal-spinal connectome that relearns the same motor task after complete paralysis.** J Neurophysiol 2021 epub [PubMed](#)
22. Williams M, Varelas EN, Olmsted ZT, Sheldon BL, Khazen O, DiMarzio M, Pilitsis JG. **Can dogs and cats really help our spinal cord stimulation patients?** Clin Neurol Neurosurg 2021 208:106831 [PubMed](#)
23. Zhao L, Song T. **Short-term spinal cord stimulation and peripheral nerve stimulation for the treatment of trigeminal postherpetic neuralgia in elderly patients.** Front Neurol 2021 12:713366 [PubMed](#) [Free Full Text](#)

Sacral Nerve Stimulation (now 1096 citations)

1. Al-Shaiji TF. **Salvage of a perfectly functioning sacral neuromodulation device (InterStim™) with asymptomatic tined lead wire skin exposure.** J Surg Case Rep 2021 2021(7):rjab310 [PubMed](#) [Free Full Text](#)
2. Bakrim N, Chabannes É, Detree P, Balssa L, Wagner L, Kleinclauss F. **Sacral neuromodulation as treatment of non-neurological vesical emptying disorders. French.** Prog Urol 2021 epub [PubMed](#)
3. Banakhar MA. **Sacral neuromodulation implanted patients: patient concerns during the COVID-19 pandemic and practical modifications.** Ther Adv Urol 2021 13:1756287221998135 [PubMed](#) [Free Full Text](#)
4. Chartier-Kastler E, Normand LL, Ruffion A, Saussine C, Braguet R, Rabut B, Ragni E, Perrouin-Verbe MA, Pierrevelcin J, Rousseau T, Gamé X, Tanneau Y, Dargent F, Biarreau X, Graziana JP, Stoica G, Brassart E, Fourmarier M, Yaghi N, Capon G, Ferchaud J, Berrogain N, Peyrat L, Pecoux F, Bryckaert PE, Melotti A, Abouihia A, Keller DUJ, Cornu JN. **Sacral neuromodulation with the interstim system for overactive bladder: 3-year results from the French prospective, multicenter, observational SOUNDS study.** Eur Urol Focus 2021 epub [PubMed](#)
5. Wang Q, Zhang WY, Liu XH, Wang MR, Lai JH, Hu H, Xu T, Xu KX. **Therapeutic effects of sacral neuromodulation on detrusor underactivity. Chinese.** Beijing Da Xue Xue Bao Yi Xue Ban 2021 53(4):671-674 [PubMed](#)
6. Wang Y, Guo R, Hu W, Zheng J, Wang Q, Jiang J, Kurpad KKN, Kaula N, Long S, Chen J, Kainz W. **Magnetic resonance conditionality of abandoned leads from active implantable medical devices at 1.5 T.** Magn Reson Med 2021 epub [PubMed](#)
7. Yang PS, Delpé S, Kowalik CG, Reynolds WS, Kaufman MR, Dmochowski RR. **Risk factor of de novo urgency and urge incontinence after autologous fascia pubovaginal sling.** Res Rep Urol 2021 13:591-596 [PubMed](#) [Free Full Text](#)

IF WIKISTIM SAVES YOU TIME. . . WIKISTIM SAVES YOU MONEY!

The existence of WIKISTIM depends entirely on the support of individuals and organizations, and the Internal Revenue Service judges our suitability to continue as a 501(c)(3) non-profit charitable corporation based on the level of public support we receive. Contributions to *The Neuromodulation Foundation* are tax-deductible for United States tax-payers aged 70 1/2 who contribute directly from an Individual Retirement Account or for those who itemize deductions. While we aren't operating at the level where we can afford to collect donations via credit cards, the PAYPAL option on the [DONATE](#) page is available for your convenience, or you

may, of course, ask your bank to send a check to *The Neuromodulation Foundation, Inc.*, 117 East 25th Street, Baltimore, MD 21218. We'd love to add your name to our list of financial supporters below!

Individual supporters 2019-21:

- Thomas Abell, MD
- Kenneth Chapman, MD
- Richard B. North, MD
- B. Todd Sitzman, MD, MPH
- Konstantin Slavin, MD, PhD

Industry support 2019-21:

- Medtronic
- Stimwave

Nonprofit support:

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

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