

May 2016 News PLEASE FORWARD TO YOUR COLLEAGUES

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SEE APPENDIX FOR THE MOST RECENT CITATIONS ADDED TO WIKISTIM

DONATIONS WELCOME

We are grateful for any donation in any amount from those who use this free resource. All donations are 100% deductible for those of you who file US income tax and itemize deductions.

PLANS FOR THE NEAR FUTURE

In order for WIKISTIM to fulfill its potential, we need completed datasheets. To that end, we are developing a form for easy online entry. This form will combine check boxes and the ability to enter free text. We hope this will make using WIKISTIM more enjoyable to use even as it increases in value to the neurostimulation community. As we create this new method of entering data, we have an enhanced opportunity to add and rearrange data fields. This would be a good time for you to send your suggestions. We are also looking for volunteers who will beta-test the new system. Once this is up and running, we expect that more people will take advantage of this useful and convenient way to earn CME credits.

We also plan to upload citations for the use of DBS to treat depression, which is a topic under consideration at the NANS/NIC meeting next month.

WISH LIST FOR ADDITIONAL WIKISTIM ENHANCEMENTS

As funding becomes available to support these enhancements, we will create a section for VNS, optimize performance on various platforms (screen sizes, browsers, operating systems), link the data fields to additional information (e.g., descriptions and preferred uses of study designs and outcome criteria, authors' CVs, etc.), incorporate cutting edge data visualization graphics that will update immediately as data are extrapolated from papers and uploaded, and offer a dynamic user experience, including the ability to save searches and customize the way the site behaves

REMINDERS

Neuromodulation: The Science

This month brings our community the opportunity to attend "Neuromodulatoin: The Science," a crossdisciplinary summit to advance the field of neuroscience. This important meeting, which is chaired by Elliot Krames, MD, Eric Grigsby, MD, MBA, and Peter Staats, MD, MBA, will take place from Wednesday May 25th to Sunday May 29th at the Hyatt Regency in San Francisco. Dr. North will be in attendance and will be happy to discuss WIKISTIM with all and sundry!

North American Neuromodulation Society and Neural Interfaces Conference Joint Meeting

Next month, we will present a session on "Maximizing the Value of Neural Interface Data" at the <u>NANS2/NIC conference</u> on June 25th through 29th. During this session, we will explain how the way something is reported predicts what will be reported and demonstrate how WIKISTIM will be a positive influence on the quality of the data that will be published as well as on the way these data are analyzed in relation to the findings of other neural interface studies. Check next month's newsletter for updates about special guests who will be joining us in making this presentation! We urge you to use the link above to access the agenda for this important meeting, which will take place at a hotel overlooking Baltimore's beautiful inner harbor.

CURRENT STATUS

Our 5 new subscribers in April increased our total to 325. Please continue to encourage your colleagues to register for access to our free resource. And THANK YOU for being early adopters!

May 1st numbers (These numbers might not add up from month to month as we remove the inevitable duplication that occurs. See appendix below for list of new citations.)

- 325 subscribers (5 new)
- SCS citations 1898 (7 new)
- DBS citations 1758 (26 new; 24 Parkinson's; 2 epilepsy)
- SNS citations 765 (2 new)
- PNS citations 40 (2 new)
- DRG citations 35 (3 new)
- GES citations 473 (3 new)

HOW THE NEUROSTIMULATION COMMUNITY CAN HELP

- Submit extracted data from published reports of your choice, or use our datasheets as a guide when you plan your study and write your paper, and then submit the datasheet to us upon journal acceptance.
- Notify us about any reports we might have missed that contain primary data on SCS, SNS, DRG, PNS, GES, DBS/OCD, DBS/Epilepsy, or reports you would like to see added for DBS/PD.
- Suggest website improvements (and thanks to those who have done this—we have incorporated your suggestions to the best of our ability).

FINANCIAL SUPPORT FOR 2015 to 2016

(Listed alphabetically by first name):

- B. Todd Sitzman, MD, MPH
- Greatbatch
- Medtronic
- The NANS Foundation (3-year grant commitment started 2014)
- NEVRO
- Richard B. North, MD
- Thomas Abell, MD

Ongoing in-kind support:

- The International Neuromodulation Society (publicity and conference registration)
- The Neuromodulation Foundation (parent non-profit, overhead and development)

• The North American Neuromodulation Society (publicity and conference registration)

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Disclosure

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

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APPENDIX: Citations added May 1, 2016

DBS-Epilepsy (We believe WIKISTIM offers the most comprehensive list of citations for this stimulation target/therapy that report primary data.)

- Möttönen T, Katisko J, Haapasalo J, Tähtinen T, Saastamoinen A, Peltola J, Öhman J, Lehtimäki K. The correlation between intraoperative microelectrode recording and 3-Tesla MRI in patients undergoing ANT-DBS for refractory epilepsy. Stereotact Funct Neurosurg 2016 94(2):86-92 http://www.ncbi.nlm.nih.gov/pubmed/27093608
- Meng DW, Liu HG, Yang AC, Zhang K, Zhang JG. Stimulation of anterior thalamic nuclei protects against seizures and neuronal apoptosis in hippocampal CA3 region of kainic acid-induced epileptic rats. Chin Med J (Engl) 2016 129(8):960-966 http://www.ncbi.nlm.nih.gov/pubmed/27064042

DBS-Parkinson's (We continue to add older DBS citations that we passed over in our initial list.)

1. Hubble JP, Busenbark KL, Wilkinson S, Pahwa R, Paulson GW, Lyons K, Koller WC. Effects of thalamic deep brain stimulation based on tremor type and diagnosis. Mov Disord 1997 12(3):337-

341 http://www.ncbi.nlm.nih.gov/pubmed/9159728

- Duff J, Sime E. Surgical interventions in the treatment of Parkinson's disease (PD) and essential tremor (ET): medial pallidotomy in PD and chronic deep brain stimulation (DBS) in PD and ET. Axone 1997 18(4):85-89 http://www.ncbi.nlm.nih.gov/pubmed/9295483
- Yokoyama T, Sugiyama K, Nishizawa S, Yokota N, Ohta S, Akamine S, Namba H. The optimal stimulation site for chronic stimulation of the subthalamic nucleus in Parkinson's disease. Stereotact Funct Neurosurg 2001 77(1-4):61-67 http://www.ncbi.nlm.nih.gov/pubmed/12378058
- 4. Vilela Filho O, da Silva DJ. Unilateral subthalamic nucleus lesioning: a safe and effective treatment for Parkinson's disease. Arq Neuropsiquiatr 2002 60(4):935-948 http://www.ncbi.nlm.nih.gov/pubmed/12563384
- 5. Tavella A, Bergamasco B, Bosticco E, Lanotte M, Perozzo P, Rizzone M, Torre E, Lopiano L. Deep brain stimulation of the subthalamic nucleus in Parkinson's disease: long-term follow-up. Neurol Sci 2002 23 Suppl 2:S111-S112 http://www.ncbi.nlm.nih.gov/pubmed/12548368
- Tamma F, Caputo E, Chiesa V, Egidi M, Locatelli M, Rampini P, Cinnante C, Pesenti A, Priori A. Anatomo-clinical correlation of intraoperative stimulation-induced side-effects during HF-DBS of the subthalamic nucleus. Neurol Sci 2002 23 Suppl 2:S109-S110 http://www.ncbi.nlm.nih.gov/pubmed/12548367
- 7. Hamel W, Schrader B, Weinert D, Herzog J, Müller D, Deuschl G, Volkmann J, Mehdorn HM. Technical complication in deep brain stimulation. Zentralbl Neurochir 2002 63(3):124-127 http://www.ncbi.nlm.nih.gov/pubmed/12457339
- 8. Uitti RJ, Tsuboi Y, Pooley RA, Putzke JD, Turk MF, Wszolek ZK, Witte RJ, Wharen RE Jr. Magnetic resonance imaging and deep brain stimulation. Neurosurgery 2002 51(6):1423-1428 http://www.ncbi.nlm.nih.gov/pubmed/12445347
- 9. Berney A, Vingerhoets F, Perrin A, Guex P, Villemure JG, Burkhard PR, Benkelfat C, Ghika J. Effect on mood of subthalamic DBS for Parkinson's disease: a consecutive series of 24 patients. Neurology 2002 59(9):1427-1429 http://www.ncbi.nlm.nih.gov/pubmed/12427897
- 10. Kulisevsky J, Berthier ML, Gironell A, Pascual-Sedano B, Molet J, Parés P. Mania following deep brain stimulation for Parkinson's disease. Neurology 2002 59(9):1421-1424 http://www.ncbi.nlm.nih.gov/pubmed/12427895
- 11. Hilker R, Voges J, Thiel A, Ghaemi M, Herholz K, Sturm V, Heiss WD. Deep brain stimulation of the subthalamic nucleus versus levodopa challenge in Parkinson's disease: measuring the on- and off-conditions with FDG-PET. J Neural Transm (Vienna) 2002 109(10):1257-1264 http://www.ncbi.nlm.nih.gov/pubmed/12373559
- Loher TJ, Burgunder JM, Weber S, Sommerhalder R, Krauss JK. Effect of chronic pallidal deep brain stimulation on off period dystonia and sensory symptoms in advanced Parkinson's disease. J Neurol Neurosurg Psychiatry 2002 73(4):395-399 http://www.ncbi.nlm.nih.gov/pubmed/12235307
- 13. Moro E, Esselink RJ, Xie J, Hommel M, Benabid AL, Pollak P. The impact on Parkinson's disease of electrical parameter settings in STN stimulation. Neurology 2002 59(5):706-713 http://www.ncbi.nlm.nih.gov/pubmed/12221161
- 14. Østergaard K, Sunde N, Dupont E. Effects of bilateral stimulation of the subthalamic nucleus in patients with severe Parkinson's disease and motor fluctuations. Mov Disord 2002 17(4):693-700 http://www.ncbi.nlm.nih.gov/pubmed/12210858
- 15. Starr PA, Christine CW, Theodosopoulos PV, Lindsey N, Byrd D, Mosley A, Marks WJ Jr. Implantation of deep brain stimulators into the subthalamic nucleus: technical approach and magnetic resonance imaging-verified lead locations. J Neurosurg 2002 97(2):370-387 http://www.ncbi.nlm.nih.gov/pubmed/12186466
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57(5):306-311 http://www.ncbi.nlm.nih.gov/pubmed/12128300

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- 18. Just H, Ostergaard K. Health-related quality of life in patients with advanced Parkinson's disease treated with deep brain stimulation of the subthalamic nuclei. Mov Disord 2002 17(3):539-545 http://www.ncbi.nlm.nih.gov/pubmed/12112204
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- 22. Matzner A, Moran A, Erez Y, Tischler H, Bar-Gad I. Beta oscillations in the parkinsonian primate: similar oscillations across different populations. Neurobiol Dis 2016 93:28-34 http://www.ncbi.nlm.nih.gov/pubmed/27083136
- 23. Velasco F, Carrillo-Ruiz JD, Salcido V, Castro G, Soto J, Velasco AL. Unilateral stimulation of prelemniscal radiations for the treatment of acral symptoms of Parkinson's disease: long-term results. Neuromodulation 2016 epub http://www.ncbi.nlm.nih.gov/pubmed/27075563
- 24. Kern K, Naros G, Braun C, Weiss D, Gharabaghi A. Detecting a cortical fingerprint of Parkinson's disease for closed-loop neuromodulation. Front Neurosci 2016 epub http://www.ncbi.nlm.nih.gov/pubmed/27065781

DRG (We believe WIKISTIM offers the most comprehensive list of citations for this stimulation target/therapy that report primary data.)

- 1. Weiner RL, Yeung A, Montes Garcia C, Tyler Perryman L, Speck B. Treatment of FBSS low back pain with a novel percutaneous DRG wireless stimulator: pilot and feasibility study. Pain Med 2016 epub http://www.ncbi.nlm.nih.gov/pubmed/27125284
- Zuidema X, Breel J, Wille F. S3 dorsal root ganglion/nerve root stimulation for refractory
 postsurgical perineal pain: technical aspects of anchorless sacral transforaminal lead placement.
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GES (We believe WIKISTIM offers the most comprehensive list of citations for this stimulation target/therapy that report primary data.)

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- 2. Smith A, Cacchione R, Miller E, McElmurray L, Allen R, Stocker A, Abell TL, Hughes MG. Minilaparotomy with adjunctive care versus laparoscopy for placement of gastric electrical stimulation. Am Surg 2016 82(4):337-342 http://www.ncbi.nlm.nih.gov/pubmed/27097627
- 3. Horn CC, Zirpel L, Sciullo MG, Rosenberg DM. Impact of electrical stimulation of the stomach on gastric distension-induced emesis in the musk shrew. Neurogastroenterol Motil 2016 epub

PNS (We believe WIKISTIM offers the most comprehensive list of citations for PNFS that report primary data.)

- Levi V, Messina G, Franzini A, Zanin L, Castelli N, Dones I. Peripheral nerve field stimulation (PNFS) as a treatment option for intractable radiation-induced facial neuropathic pain in a laryngeal cancer survivor: a case report. World Neurosurg 2016 epub http://www.ncbi.nlm.nih.gov/pubmed/27064100
- 2. Trentman TL, Maloney JA, Wie CS, Rebecca AM, Rosenfeld DM. Use of botulinum toxin injections to treat peripheral stimulator induced facial muscle twitching: a case report. Springerplus 2015 epub http://www.ncbi.nlm.nih.gov/pubmed/26558174

SCS (We believe WIKISTIM offers the most comprehensive list of citations for this stimulation target/therapy that report primary data.)

- 1. Fama CA, Chen N, Prusik J, Kumar V, Wilock M, Roth S, Pilitsis JG. The use of preoperative psychological evaluations to predict spinal cord stimulation success: our experience and a review of the literature Neuromodulation 2016 epub http://www.ncbi.nlm.nih.gov/pubmed/27121447
- Lee PM, So Y, Park JM, Park CM, Kim HK, Kim JH. Spinal cauda equina stimulation for alternative location of spinal cord stimulation in intractable phantom limb pain syndrome: a case report. Korean J Pain 2016 29(2):123-128 http://www.ncbi.nlm.nih.gov/pubmed/27103968
- 3. Shu W, Li Y, Tao W, Hu Y. Spinal cord stimulation combined with microsurgical DREZotomy for pain due to syringomyelia. Br J Neurosurg 2016 epub http://www.ncbi.nlm.nih.gov/pubmed/27080749
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- 5. Tjepkema-Cloostermans MC, de Vos CC, Wolters R, Dijkstra-Scholten C, Lenders MW. Effect of burst stimulation evaluated in patients familiar with spinal cord stimulation. Neuromodulation 2016 epub http://www.ncbi.nlm.nih.gov/pubmed/27059278
- 6. Ghaly RF, Lissounov A, Candido KD, Knezevic NN. Are there a [sic] guidelines for implantable spinal cord stimulator therapy in patients using chronic anticoagulation therapy? A review of decision-making in the high-risk patient. Surg Neurol Int 2016 epub http://www.ncbi.nlm.nih.gov/pubmed/27127698
- 7. Abd-Elsayed A. Lead through needle technique for placing spinal cord stimulator leads: a novel alternative to the loss of resistance technique. J Clin Anesth 2016 epub http://www.ncbi.nlm.nih.gov/pubmed/27041255

SNS (We believe WIKISTIM offers the most comprehensive list of citations for this stimulation target/therapy that report primary data.)

- Rademakers KL, Drossaerts JM, van Kerrebroeck PE, Oelke M, van Koeveringe GA. Prediction of sacral neuromodulation treatment success in men with impaired bladder emptying-time for a new diagnostic approach. Neurourol Urodyn 2016 epub http://www.ncbi.nlm.nih.gov/pubmed/27062496
- 2. Noblett KL, Dmochowski RR, Vasavada SP, Garner AM, Liu S, Pietzsch JB. Cost profiles and budget impact of rechargeable versus non-rechargeable sacral neuromodulation devices in the treatment of overactive bladder syndrome. Neurourol Urodyn 2016 epub http://www.ncbi.nlm.nih.gov/pubmed/27062384