



July 2016 News

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#### **NEW THIS MONTH!**

We added a downloadable Powerpoint presentation describing WIKISTIM to the [ABOUT](#) section. Please share this with your colleagues.

#### **EDITORIAL IN *Trials* CALLS FOR MORE STRUCTURE IN RESEARCH REPORTS**

In a 2015 Editorial (Altman, DG. Making research articles fit for purpose: structured reporting of key methods and findings. *Trials* 16:53, 2015), Douglas G. Altman of Oxford decries the “current standard story-telling format [of research reports] that embeds factual information and numerical results within the narrative text, making some details hard to extract and, crucially, masking the absence of essential material.” He quotes Riveros et al. (Riveros C, Dechartres A, Perrodeau E, Haneef R, Boutron I, Ravaud P. Timing and completeness of trial results posted at ClinicalTrials.gov and published in journals. *PLoS Med* 10:e1001566, 2013), who propose that “using templates with mandatory reporting of some elements may facilitate the work of researchers by reminding them what they need to report and by standardizing their reporting.” WIKISTIM offers such a template to neurostimulation researchers. Even as we are using our customized templates (and refining them, see below) to make published primary data more accessible and more easily analyzable, we are encouraging researchers designing studies and/or writing up their results to refer to our templates to facilitate their work.

#### **NANS2/NIC**

The [NANS2/NIC conference](#) that took place in June in Baltimore was a huge success. We have witnessed the expansion of this annual meeting, beginning in the 1970's with the Neural Prosthesis Workshop at NIH, from a small agenda of funded project updates to a broad agenda covering a range of new technical and clinical developments. The proximity of this year's conference to Washington, DC facilitated attendance by NIH, FDA and other DC area groups. More than 500 people attended, including more than 100 students, and more women than we have ever seen at a NANS meeting! We congratulate everyone involved.

We had the pleasure of organizing an hour session on maximizing the value of neural interface data, beginning with a presentation on WIKISTIM and followed, by way of example, by an FDA presentation.

#### **PLANS FOR THE NEAR FUTURE**

We are continuing our work to develop a form for easy online data entry (filling in datasheets for each

citation listed). Challenges include dealing with the huge number of options that we must offer for various fields (e.g., inclusion criteria and, especially, outcome measures). This form will combine check boxes and the ability to enter free text. We believe the new method of data entry will make using WIKISTIM more enjoyable even as it increases in value to the neurostimulation community. We are also taking advantage of this opportunity to add and rearrange data fields, and would be pleased to consider any suggestions you might have. Filling in the data for a published paper (including your own work) is a convenient and rewarding way to earn CME credits.

Our ideas for additional WIKISTIM enhancements continue to outstrip our financial resources. For example, eventually we plan to 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 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.

### **REMINDER: 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.

### **CURRENT STATUS**

#### **July 1st numbers (see the appendix for the list of new citations.)**

- 352 subscribers (14 new) Please continue to encourage your colleagues to register for access to our free resource.
- SCS citations 1916 (2 new)
- DBS citations 2006 (62 new: 2 depression; 0 epilepsy; 1 OCD; 51 PD)
- SNS citations 779 (5 new)
- PNS citations 42 (3 new)
- DRG citations 36 (0 new)
- GES citations 477 (2 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.

### **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)

### **EDITORIAL BOARD**

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#### **Managing editor**

Jane Shipley

#### **Disclosure**

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

#### **Contact**

The Neuromodulation Foundation, Inc.  
117 East 25th Street  
Baltimore, MD 21218  
wikistim@gmail.com  
wikistim.org  
neuromodfound.org

### **APPENDIX: Citations of papers that report primary data added July 7, 2016**

#### **DBS Depression (updating our comprehensive list for DBS/Depression)**

1. Rummel J, Voget M, Hadar R, Ewing S, Sohr R, Klein J, Sartorius A, Heinz A, Mathé AA, Vollmayr B, Winter C. Testing different paradigms to optimize antidepressant deep brain stimulation in different rat models of depression. *J Psychiatr Res* 2016 81:36-45  
<http://www.ncbi.nlm.nih.gov/pubmed/27367210>
2. Fenoy AJ, Schulz P, Selvaraj S, Burrows C, Spiker D, Cao B, Zunta-Soares G, Gajwani P, Quevedo J, Soares J. Deep brain stimulation of the medial forebrain bundle: distinctive responses in resistant depression. *J Affect Disord* 2016 203:143-151 <http://www.ncbi.nlm.nih.gov/pubmed/27288959>

#### **DBS OCD (updating our comprehensive list for DBS/OCD)**

1. Coenen VA, Schlaepfer TE, Goll P, Reinacher PC, Voderholzer U, Tebartz van Elst L, Urbach H, Freyer T. The medial forebrain bundle as a target for deep brain stimulation for obsessive-

### **DBS PD (adding to 2016 citations)**

1. Antosik-Wójcicka AZ, Świącicki Ł, Bieńkowski P, Mandat T, Sołtan E. Othello syndrome after STN DBS - psychiatric side-effects of DBS and methods of dealing with them. *Psychiatr Pol* 2016 50(2):323-327 <http://www.ncbi.nlm.nih.gov/pubmed/27288677>
2. Cozac VV, Ehrensperger MM, Gschwandtner U, Hatz F, Meyer A, Monsch AU, Schuepbach M, Taub E, Fuhr P. Older candidates for subthalamic deep brain stimulation in Parkinson's disease have a higher incidence of psychiatric serious adverse events. *Front Aging Neurosci* 2016 8:132 <http://www.ncbi.nlm.nih.gov/pubmed/27375478>
1. Gee LE, Walling I, Ramirez-Zamora A, Shin DS, Pilitsis JG. Subthalamic deep brain stimulation alters neuronal firing in canonical pain nuclei in a 6-hydroxydopamine lesioned rat model of Parkinson's disease. *Exp Neurol* 2016 epub <http://www.ncbi.nlm.nih.gov/pubmed/27373204>
2. Gerard CS, Metman LV, Pal G, Karl J, Sani S. Severe, symptomatic, self-limited unilateral DBS lead edema following bilateral subthalamic nucleus implantation: case report and review of the literature. *Neurologist* 2016 21(4):58-60 <http://www.ncbi.nlm.nih.gov/pubmed/27348140>
3. Mathkour M, Garces J, Scullen T, Hanna J, Valle-Giler E, Kahn L, Arrington T, Houghton D, Lea G, Biro E, Bui CJ, Sulaiman OA, Smith RD. Short and long-term outcomes of deep brain stimulation in Parkinson's disease patients 70-years and older. *World Neurosurg* 2016 epub <http://www.ncbi.nlm.nih.gov/pubmed/27297246>
4. Pepper J, Meliak L, Akram H, Hyam J, Milabo C, Candelario J, Foltynie T, Limousin P, Curtis C, Hariz M, Zrinzo L. Changing of the guard: reducing infection when replacing neural pacemakers. *J Neurosurg* 2016 epub <http://www.ncbi.nlm.nih.gov/pubmed/27315022>
5. Przybyszewski AW, Ravin P, Pilitsis JG, Szymanski A, Barborica A, Novak P. Multi-parametric analysis assists in STN localization in Parkinson's patients. *J Neurol Sci* 2016 366:37-43 <http://www.ncbi.nlm.nih.gov/pubmed/27288773>
6. Ramirez-Zamora A, Smith H, Youn Y, Durphy J, Shin DS, Pilitsis JG. Hyperhidrosis associated with subthalamic deep brain stimulation in Parkinson's disease: insights into central autonomic functional anatomy. *J Neurol Sci* 2016 366:59-64 <http://www.ncbi.nlm.nih.gov/pubmed/27288777>
7. Seinstra M, Wojtecki L, Storzer L, Schnitzler A, Kalenscher T. No effect of subthalamic deep brain stimulation on intertemporal decision-making in Parkinson patients. *eNeuro* 2016 3(2) <http://www.ncbi.nlm.nih.gov/pubmed/27257622>
8. Swann NC, de Hemptinne C, Miocinovic S, Qasim S, Wang SS, Ziman N, Ostrem JL, San Luciano M, Galifianakis NB, Starr PA. Gamma oscillations in the hyperkinetic state detected with chronic human brain recordings in Parkinson's disease. *J Neurosci* 2016 36(24):6445-6458 <http://www.ncbi.nlm.nih.gov/pubmed/27307233>

### **DBS PD (catching up—this month adding citations from 2004)**

1. Alberts JL, Elder CM, Okun MS, Vitek JL. Comparison of pallidal and subthalamic stimulation on force control in patient's with Parkinson's disease. *Motor Control* 2004 8(4):484-499 <http://www.ncbi.nlm.nih.gov/pubmed/15585903>
2. Alegret M, Valldeoriola F, Martí M, Pilleri M, Junqué C, Rumià J, Tolosa E. Comparative cognitive effects of bilateral subthalamic stimulation and subcutaneous continuous infusion of apomorphine in Parkinson's disease. *Mov Disor* 2004 19(12):1463-1469 <http://www.ncbi.nlm.nih.gov/pubmed/15390065>
3. Alterman RL, Shils JL, Gudesblatt M, Tagliati M. Immediate and sustained relief of levodopa-induced dyskinesias after dorsal relocation of a deep brain stimulation lead. Case report. *Neurosurg Focus* 2004 17(1):E6 <http://www.ncbi.nlm.nih.gov/pubmed/15264775>

4. Antonini A, Landi A, Mariani C, DeNotaris R, Pezzoli G. Deep brain stimulation and its effect on sleep in Parkinson's disease. *Sleep Med* 2004 5(2):211-214  
<http://www.ncbi.nlm.nih.gov/pubmed/15033146>
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<http://www.ncbi.nlm.nih.gov/pubmed/15390056>
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<http://www.ncbi.nlm.nih.gov/pubmed/15649601>
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#### **GES (updating our comprehensive list for GES)**

1. Angeli TR, Du P, Midgley D, Paskaranandavadivel N, Sathar S, Lahr C, Abell TL, Cheng LK, O'Grady G. Acute slow wave responses to high-frequency gastric electrical stimulation in patients with gastroparesis defined by high-resolution mapping. *Neuromodulation* 2016 epub <http://www.ncbi.nlm.nih.gov/pubmed/27284964>
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#### **PNFS (updating our comprehensive list for PNFS)**

1. Frahm KS, Hennings K, Vera-Portocarrero L, Wacnik PW, Mørch CD. Muscle activation during peripheral nerve field stimulation occurs due to recruitment of efferent nerve fibers, not direct muscle activation. *Neuromodulation* 2016 epub <http://www.ncbi.nlm.nih.gov/pubmed/27353079>
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#### **SCS (updating our comprehensive list for SCS)**

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