
APPOINTMENTS

- Associate Professor- Division of Neurosurgery and Department of Neuroscience and Experimental Therapeutics, Albany Medical College, Albany NY August 2011-July 2015
- Affiliate Faculty- University of Massachusetts Worcester MA August 2011-2017
- Assistant Professor- Division of Neurosurgery, Department of Clinical Population and Health Research, Neuroscience, Director of Functional Neurosurgery University of Massachusetts Worcester, MA 2007-August 2011
- Clinical Instructor – Department of Neurosurgery, Rush University Chicago IL 2006-2007

ACTIVE LICENSURE/BOARDS

- State of New York 2011

PATENTS

- US 2011/0077504 A1 Fischer G, Cole C, Pilitsis JG. System and Method for Robotic Surgical Intervention

GRANT AND CONTRACTS

NIH (Current)

NIH 1R01CA166379-01A1

Fischer; Pilitsis MPI 5/17/2013-present
AMC award of \$1.8M

MR-Guided Precision Conformal Ablation Therapy for Brain Tumors

The major goals of this project are to provide new tools capable of targeting and ablating difficult-to-reach regions of human brain for treatment of cancer and other disorders.

NIH/NIBIBR03EB024705

Golestani Rad PI; key personnel
7/1/2017-present \$50,000

Computational Methodologies for Safety Assessment of MRI in Patients with Deep Brain Stimulation Implants

The major goal of this project is to develop computational methodologies that consistently and reliably predict heating of brain tissue during MRI of patients with deep brain stimulation implants.

NIH (Completed)

NIH R43 NS064640-01A2

Margolin Co-PI; Novak Co-PI;
Pilitsis Co-Investigator
12/15/2009 - 12/14/2010.
Total direct cost \$202,186

Software Guided Localization of the Subthalamic Nucleus during DBS Surgeries;
University of Massachusetts

Investigator Sponsored Research (Active)

Boston Scientific

Pilitsis (PI) 2/8/18-present
\$71,088

The Efficacy of Combination Subthreshold and Tonic Spinal Cord Stimulation in Chronic Pain Patients The major goal of this project is to compare the effects of simultaneously delivering concurrent tonic and subthreshold stimulation on outcomes.

Abbott

Pilitsis (PI) 6/2/17-present
\$26,263

Stimulation Change Effects on Quantitative Sensory Testing in Neuromodulation Patients

This is a prospective study looking at the effects of bursting stimulation in SCS patients using quantitative sensory testing.

Jazz Pharmaceuticals

Pilitsis (PI) 7/29/17-present
\$9,947

Ziconotide treatment in rodent model of vincristine induced neuropathy

The major goal of this project is to provide insight into how Ziconotide may be used to treat cancer complications, determine the dosage for optimal outcomes, and help define the mechanism of action.

Jazz Pharmaceuticals

Pilitsis (PI) 11/22/16-present
\$109,638

Prospective Study of Conservative Ziconotide Dosing as a First-Line Intrathecal Drug Therapy for Neuropathic Pain

The major goal of this project is to prospectively analyze a conservative treatment algorithm developed retrospectively (in a previous study) from our pain population.

General Electric Global Research

Pilitsis (PI) 8/10/16-present
\$241,168

Deep Brain Stimulation for Parkinson's Disease

The major goals of this project are to collaborate on a series of investigations for the improvement of magnetic resonance imaging (MRI) for patients receiving deep brain stimulation (DBS) therapy, using functional MRI to understand how changes in frequency affect brain activation following DBS. Improvements in perioperative scans were developed.

General Electric Global Research

Pilitsis (PI) 6/2/17-present
\$32,400

Use of Anesthesia Monitoring Tool to Optimize Propofol Dosing in SCS Patients

This collaboration is intended to utilize the GE Propofol In Breath System (PIBS) machine during SCS surgery in order to better monitor and dose patients receiving propofol as standard anesthesia.

Investigator Sponsored Research Completed

Boston Scientific

Pilitsis (PI) 6/1/15-2017
\$20,134

A4057: "CoverEdge Algorithm: Study to Characterize the Effects of Programming Features of the Boston Scientific Precision Spectra AM Spinal Cord Stimulator System Using the CoverEdge Surgical Leads."

Medtronic

Pilitsis (PI) 3/1/17-12/30/17
\$11,910

"Correlation between active contacts on thoracic SCS and outcomes/demographics"

Abbott

Pilitsis (PI) 10/1/17-12/31/17
\$4,590

"Retrospective review of pre-operative MRIs in patients having undergone lumbar spine surgery"

Medtronic

Pilitsis (PI) 4/6/17-12/31/17
\$58,593

"The Efficacy of Shuffle High Frequency and Traditional Spinal Cord Stimulation in Chronic Pain Patients"

Jazz Pharmaceuticals

Pilitsis (PI) 10/1/15-8/30/16
\$11,884

"Retrospective Analysis of Prialt as a First-Line Intrathecal Drug Therapy."

2008 -2009 **Worcester Biomedical Foundation Grant**

"Functional Imaging as a Marker for Parkinson's Disease"
PI for \$30,000/yr grant; University of Massachusetts

Industry Study Site- Active

2017

Boston Scientific

"Precision Retrospective Outcomes (PRO) Study"

2017

St. Jude

"Post Market Clinical Follow Up Evaluating the Infinity Deep Brain Stimulation Implantable Pulse Generator System" (PROGRESS)

2017 **St. Jude**
Prospective Evaluation Comparing the Effects of Constant Current versus Constant Voltage in Deep Brain Stimulation using Hybrid Systems” (PREFERENCE-H)

Industry Study Site- Pending

2017 **ReNeuron**
Pilot Investigation of Stem Cells in Stroke (PISCES): “A Randomised, Controlled Study of the Efficacy and Safety of Intracerebral Stem Cells (CTX0E03 DP) in Subjects with Disability Following an Ischaemic Stroke”

2017 **Nevro**
“A Multi-Center, Prospective, Pragmatic, Randomized, Controlled Clinical Trial to Compare HF10 Therapy to Conventional Medical Management in the Treatment of Non-Surgical Refractory Back Pain”

Industry Study Site- Completed

2017 **Boston Scientific Neuromodulation Corporation**
“A prospective, multicenter, double-blinded, randomized, controlled study to evaluate the safety and effectiveness of motor function and overall quality of life in patients with the Vercise DBS System for the treatment of Parkinson's disease”

2017 **Boston Scientific**
“RELIEF (A Global Registry to Evaluate Long-Term Effectiveness of Neurostimulation Therapy for Pain)”

2017 **Medtronic Inc.**
“Prospective, Randomized Study of Multicolumn Implantable Lead Stimulation for Predominant Low Back Pain” (PROMISE)

5/2016 **St. Jude Medical Neuromodulation Division**, Site Primary Investigator
“SUNBURST (A clinical evaluation for the management of patients with failed Back surgery syndrome.”

2012 **Advanced Neuromodulation Systems, Inc. D/B/A St. Jude Medical Neuromodulation Division**
“A clinical evaluation for the management of patients with major depressive disorder, single or recurrent episode, with deep brain stimulation (Protocol C-07-01)

NATIONAL LEADERSHIP POSITIONS

- 2018-current International Neuromodulation Society
2018-current – INS Therapy Consensus Committee
2018-2019 – Scientific Program Committee
- 2014-current NREF Development Committee Member
- 2018-current FDA Neurological Panel Member
- 2012-current Executive Board Member - ASSFN
- 2014-current North American Neuromodulation Society- Board of Directors
2014- 2016 Founding Chair- Women in Neuromodulation
- 2015-2018 AANS Scientific Program Committee Member
- 2006-2017 AANS/CNS Pain Section
2006-2008- Elected member of Executive Council
2008-2011- Secretary Treasurer
2011-2013 – Chair- Elect
2013-2015- Chair
2015-2017- Immediate Past Chair
- 2008-2015 Executive Council- AANS Women in Neurosurgery
2011-2012- Secretary Treasurer
2012-2013- Chair- Elect
2013-2014- Chair
2014-2015 Immediate Past Chair
- 2009-2015 Council of State Neurosurgical Societies
2011-2013- Vice Chair- Workforce Committee
2012-2015- Chair- Public Relations Subcommittee
- 2011-2014 Executive Council- AANS/CNS Section on Trauma
2011-2013- Chair-publications committee
- 2012-2014 Education Committee- Congress of Neurological Surgeons
- 2012-2014 Think First Board of Directors
- 2008-2011 Scientific Program Committee- Congress of Neurological Surgeons
- 2008-2015 Guidelines Committee of AANS/CNS
- 2002-2008 Young Neurosurgeons Committee of the AANS

STUDY SECTIONS

- 2015-present (ZRG1 SBIB-Q) PAR Panel: Academic-Industrial Partnerships Research for Cancer Diagnosis and Treatment; standing member

2017-present (BMIT-A) Biomedical Imaging Technology A Study Section; guest member

HONORS AND AWARDS

2017 Sosa Academy of Medicine – Educational Development & Innovation Award Albany Medical College Graduation in 2017

2015 Sosa Academy of Medicine – Outstanding Mentor Albany Medical College- one award given annually or biennially to most deserving medical school faculty Albany Medical College Graduation in 2017

2011 Congress of Neurological Surgery- CSNS Section- Best poster- Medial Student Education in Neurosurgery

2010-11 Selected for Junior Faculty Development Program University of Massachusetts

2008,2009 Nominee- Deep Brain Stimulation Team Champions of Excellence Award; UMass Memorial Medical Center

2003 William H. Sweet Young Investigator Award Annual National award in Pain research- AANS/CNS Pain section

2003 Resident Award – Best research presentation Michigan Association of Neurological Surgeons

2003 Semifinalist- Student research National Neurotrauma Society

2001,2002,2003 Academic Achievement Award Dept. of Neurosurgery- Wayne State University

2001, 2002 Neuroscience Travel Award- Wayne State University

1999 Intern of the Year Department of Surgery- Wayne State University

1996,1997 Dean’s Certificate for Outstanding Research Endeavor Albany Medical College

EDUCATIONAL ACTIVITIES

Other Awards

2018 Faculty mentor- AANS Third Place Eposter award given at 2018 AANS Annual Scientific Meeting; Recipient: Marisa DiMarzio BS “Use of functional MRI to understand modulation of chronic pain in Parkinson Disease patients with DBS”

- 2016 Faculty mentor- "Recognizing Excellence in Poster Presentation" award presented at Albany Medical College Graduate Student Awards Day; Recipient: Lucy Gee, PhD "The effects of subthalamic deep brain stimulation on sensory thresholds and sensory neurocircuitry in a 6-hydrodopamine rodent model of Parkinson's disease"
- 2010 Faculty mentor- AANS national medical student award- 1 award given annually; Recipient: Gina Deck BS "The effect of age and comorbidities on outcomes in subdural hematomas"
- 2009 Faculty mentor- AANS national medical student award Recipient: Anthony Burrows BS "Comparison of gait and cognitive function with STN v. ZI DBS in Parkinson's Disease"
- 2008 American Parkinson's Disease Association Summer Fellowship Faculty mentor- Anthony Burrows BD "Comparison of gait and cognitive function with STN v. ZI DBS in Parkinson's Disease" University of Massachusetts

Teaching

- 2011-2015 Co-director- National mentorship program for medical students in neurosurgery through Women in Neurosurgery
- 2012-current Founder/Organizer- Albany Medical College Educational Program for Parkinson's Disease patients May 19, 2012, June 5, 2013
- 2009-2011 Director of Medical Student rotation in Neurosurgery/ENT 3rd year medical student rotation (30-40 students); lecture to all Medical students in surgery
- 2007-2011 Founder/Organizer University of Massachusetts Educational Program for Parkinson's Dec 1, 2007; May 1, 2008, April 30, 2009, May 15, 2010; May 7, 2011 (150 community attendees; 5-10 medical student volunteers)
- 2010-2011 High School Summer Internship- (1 student for 1 month); exposure to clinical practice and research in neuroscience
- 2008-2011 Examiner, End of Third Year Examination (10 students)
- 2008- 2011 AMWA Faculty Advisor; supervise 4 events annually and fundraising; University of Massachusetts
- 2010 Judge- Worcester School District Science Fair Worcester, MA
- 2000-2002 Neurophysiology Course/Lab, Teaching Assistant, 15 students Wayne State University

Advising

Current

- Aira Agrawal (Summer 2018) Summer Lab Student from Emma Willard
- Andrea Liss (Summer 2018) Summer Lab Student from SUNY Binghamton
- Harini Byraju (Summer 2018) Summer Lab Student from Shaker High School
- Maria Hancu (Summer 2018) Summer Lab Student from Shenendehowa High School
- Olga Khazen (Summer 2018) Summer Lab Student from Union College
- Shelby Sabourin (Summer 2018) Summer Lab Student from University of Rochester
- Drishti Panse (Fall 2017-current) Physician/Scientist student; thesis advisor for MDDR; use of FUS to treat chronic migraine.
- Ilknur Telkes (Fall 2017-current) Post-doctoral fellow; exploration of intraoperative LFPs and SUAs to find biomarkers with signal processing techniques for optimization of neuromodulation treatment in movement disorders and chronic pain
- Tanweer Rashid (Fall 2017-current) Post-doctoral fellow; understanding neural connectivity in Parkinson's disease deep brain stimulation

Past

- Youngwon Youn (2014-2017) Medical Student; thesis advisor for MDDR; SCS patients and how high frequency stimulation affects pain and sensory thresholds
- Zohal Ghulam-Jelani (2017) Medical Student; prospectively analyzing data collected in neuropathic pain patients treated with ziconotide intrathecal drug therapy
- Hirah Khan (2017) Medical Student; analyzing use of anticoagulation therapies and SCS outcomes as well as working with our SCS database
- Yufan Lin (2017) Medical Student; propofol concentration in exhalation of SCS patients and understanding the interaction between location of active cathode contacts and SCS outcomes
- Amelia Stapleton (2017) Undergraduate student at Smith College; effects of subthalamic nucleus DBS with duloxetine on escape/avoidance behavior in a Parkinson's disease pain rodent model
- Tamana Kaderi (2015) Medical student; tremor rating scale outcomes in patients with DBS for PD

- Stephan Owusu-Sarpong (2015) Medical student; low frequency subthalamic nucleus deep brain stimulation on chronic pain outcomes
- Stephanie Owusu (2015) Medical student; patient satisfaction with subparesthesia waveforms
- Claire Collison (2015-2016) Medical student; intraoperative neuromonitoring in determining physiologic midline in SCS
- Rasan Cherala (2015) Medical student; psychological assessment tool as a predictor for SCS outcomes
- Olivia Marola (2015-2016) Post-Bachelor student; expression of cfos in brain pain nuclei with neuromodulation
- Abigail Belasen (2014-2016) Medical student; effect of pinch stimulus on local field potentials
- Khizer Rizvi (2015-2016) Medical Student; effects of peripheral nerve stimulation on sensory thresholds
- Philip Yeung (2015-2016) Medical student; effects of neuromodulation on quantitative sensory testing
- Steve Roth (2012-2016) Medical Student; intraoperative monitoring for spinal cord stimulation; Resident in neurosurgery
- Lucy Gee (2014-2016) MD/ PhD student; thesis advisor; assessment of SCS/DBS on pain in PD rodent model
- Heather Smith (2014-2016) Medical student; neuropsychological effects of DBS long-term; Resident in neurosurgery
- Nita Chen (2014-2016) Medical student; effect of eye opening on local field potentials
- Tina Ramineni (2014-2016) Medical student; effect of SCS on sleep
- Priscilla De La Cruz (2014-2016) Medical student; directs research on animal and human pain and SCS
- Steve Lange (2014-2016) Medical student; effect of SCS on pedometry
- Brant Lai (2014-2016) Undergraduate student; effect of eye opening on local field potentials
- Hans Boggs (2014-2016) Medical student; the effects of DBS lead location on head tremor in essential tremor

- Sameah Haider (2014-2015) Medical student; complications/outcomes of neuromodulation; Resident in neurosurgery
- Samik Patel (2014-2015) Medical student; prospective SCS outcomes database
- Max Kahn (2014-2015) Medical Student; role of interleaving in DBS for Parkinson Disease; Neurosurgical content in medical education; Resident in neurosurgery
- Maheen Khan (2014) UKMC Medical student; case report on thoracic radiculopathy after spinal cord stimulator placement; Resident in neurosurgery
- Jessica Haller (2013-2015) Undergraduate Student SUNY Albany; research assistant for DBS/SCS patient studies
- Nicole Patel (2014) Medical student; effect of DBS on pre-pulse inhibition and startle response
- Chris Fama (2014-2016) Undergraduate Student University of Miami; research assistant for DBS/SCS patient studies
- David Levine (2012-2014) Medical student; directed research on accuracy of DBS lead placement; directed writing of trigeminal neuropathic pain chapter
- Vikas Parmar (2011-2014) Medical student; directed research on impact of DBS on impulse control disorders in a prospective cohort of DBS patients; directed writing of case report of Rosai Dorfman and paper on neurosurgical treatment of pain; Resident- Univ of Wisconsin; Madison
- Cailey Simmons (2013-2014) Medical student; assisted in editing text book and review papers.
- Elaina Pullano (2013) Undergraduate Student; Williams; peripheral nerve stimulation outcomes
- Sujoy Phookan (2012-2014) Medical Student; DBS for Essential Tremor chapter and work on SCS for failed neck surgery syndrome; Resident in medicine
- Sarah Keating (2013) Medical Student; SCS for failed back surgery syndrome; Resident in neurology
- Britney Atwater (2010-2013) Undergraduate Student; directed her research in outcomes in neurosurgery; current study on impact of DBS on stress in a rodent model of Parkinson's disease; Worcester Polytechnic Institute (2010-current)
- Anthony Burrows (2007-2011) Medical Student; directed his research in DBS, healthcare utilization, general neurosurgery; Resident in Neurosurgery- Mayo Clinic 2011-current
- Mary Linton Peters (2007-2011) Medical Student; directed her research in olfaction, DBS, and fMRI, and neurology/oncology; Resident in Medicine- BI

Deaconess 2011- current

- Jacob Kleinman (2008-2011) Medical Student; directed his research in olfaction and fMRI; MPH Student; Harvard University 2013; Resident in emergency medicine; Cancer research
- Gina Deck, MD (2008-2009) Medical Student; directed her research in outcomes after subdural hematomas; Resident; Neurology; Lahey Clinic 2010
- Micah Blais (2010-2011) Medical Student; directed his research in health care quality improvement; Resident; Orthopedic Surgery; Massachusetts General Hospital 2012
- Sandra Beverly (2010-2012) Medical Student; directed her research in medical education; Medical Student (4th year); University of Massachusetts; Resident in emergency medicine
- Julie Sargent (2010-2011) Undergraduate Student; directed her research in outcomes in neurosurgery; Hampton College 2010
- Cassandra Cruz (2010-2011) Undergraduate Student; Faculty Mentor for major qualifying project in health care quality improvement; Worcester Polytechnic Institute 2011
- Daniel Warden (2010-2011) Undergraduate Student; directed his research in outcomes in neurosurgery; UMass Lowell 2011; Medical Student- University of Massachusetts

Thesis Committee: Advisor

- Marisa DiMarzio (2017-current) /PhD; Advisor, Albany Medical College
- Abigail Hellman (2017-current) /PhD; Advisor, Albany Medical College
- Miriam Shao (2017-current) MD with Distinction in Research Committee; Advisor, Albany Medical College
- Tarun Prabhala (2017-current) MD with Distinction in Research Committee; Advisor, Albany Medical College
- Jacquelyn MacDonnell (2017-current) MD with Distinction in Research Committee; Advisor, Albany Medical College
- Vignesh Kumar (2015-2017) MD with Distinction in Research Committee; Advisor, Albany Medical College
- Arun Chockalingam (2015-2017) MD with Distinction in Research Committee; Advisor, Albany Medical College
- Brian Kaszuba (2015-2017) MD with Distinction in Research Committee; Advisor,

Albany Medical College

- Lucy Gee (2013-2016) MD/PhD; Advisor, Albany Medical College

Thesis Committee: Committee Member

- Wilson Yu (2012- 2015) PhD Candidate; Thesis committee member, Albany Medical College
- Manav Kumar (2014-2016) MDDR committee; Thesis Committee Member, Albany Medical College
- Paul MacMahon (2012-2014) MD with Distinction in Research Committee; Thesis Committee member, Albany Medical College
- Sujoy Phookan (2012-2014) MD with Distinction in Research Committee; Thesis Committee member, Albany Medical College
- Gregory Cole (2010-2012) PhD Candidate; Thesis committee member, Worcester Polytechnic Institute

PROFESSIONAL MEMBERSHIPS

Neurosurgery

2014-current	North American Neuromodulation Society
2014-current	International Neuromodulation Society
2008-current	American Association of Stereotactic and Functional Neurosurgery
2008-current	Council of Society of Neurological Surgeons
2004-current	AANS/CNS Section in Pain
2000-current	American Association of Neurological Surgeons
2000-current	Women in Neurosurgery
1999-current	Congress of Neurological Surgeons

General

2016-current	Alpha Omega Alpha (AOA) – Medical Honor Society
2011-current	Medical Society of the State of New York
2008-2011	Massachusetts Medical Society; Worcester District Society
2006-2007	Illinois Medical Society
1998-2006	Medical Society of the State of Michigan; Wayne County
1994-2011	American Medical Association

CLINICAL SERVICE

2017-Present	Finance Committee - Albany Medical Center
2015-Present	SAB Committee-Albany Medical Center
2012-2017	OR committee – Albany Medical Center
2012-2017	Anesthesia QIT committee- Albany Medical Center
2012-2018	Admissions Committee- Elected member-

2008-2011	University of Massachusetts Anesthesia QIT committee- University of Massachusetts
2008-2011	Quality Officer- Selected member Department of Surgery, University of Massachusetts
2008-2011	Founder/organizer Parkinson's Disease Support Group University of Massachusetts
2001-2006	Marshall American Association of Neurological Surgeons

EDITORIAL BOARD

1. Neuromodulation
2. Journal of Neurosurgery: Neurosurgical Focus Issue; February 2018 (Topic Editor)
3. Operative Neurosurgery (Section Editor for Stereotactic and Functional)

REVIEWER

1. Brain Sciences
2. Journal of Neurological Sciences
3. Journal of Pain Medicine
4. Journal of Neurosurgery
5. Neuromodulation
6. Neurosurgery
7. Neurocase
8. Operative Neurosurgery
9. World Neurosurgery

BIBLIOGRAPHY

Textbooks

HS Smith, **JG Pilitsis** (Eds.), *The Art and Science of Palliative Medicine*. Hong Kong, China: AME Publishing Company, 2013

C Argoff, A Dubin, **JG Pilitsis** (Eds), *Pain Management Secrets 4E*, New York, Elsevier, 2018.

Levin E, **Pilitsis JG**, Sagher O (Eds). *Cases in Pain Neurosurgery*. Oxford University Press. In Press.

Brown JA, **Pilitsis JG**, Schulder M (Eds). *Functional Neurosurgery: The Essentials*. Thieme Publishers. In Press.

Peer reviewed journal articles

1. **Pilitsis JG**, Kimelberg HK. Adenosine receptor mediated stimulation of intracellular calcium in acutely isolated astrocytes. *Brain Research* 1998 Jul; 798:294-303.

2. **Pilitsis JG**, Diaz FG, Wellwood J, O'Regan MH, Fairfax MR, Phillis JW, and Coplin WM. Quantification of free fatty acids in human cerebrospinal fluid. *Neurochemical Research* 2001 Dec;26:1265-70.
3. **Pilitsis JG**, Diaz FG, O'Regan MH, Phillis JW. Inhibition of Na⁺/Ca²⁺ exchange by KB-R7943, a novel reverse mode antagonist, attenuates free fatty acid efflux in rat cerebral cortex during ischemia-reperfusion injury. *Brain Research* 2001 Oct;916:192-8.
4. **Pilitsis JG**, Diaz FG, O'Regan MH, Phillis JW. Inhibition of Na⁺/H⁺ exchange by SM-20220, a novel selective antagonist, attenuates free fatty acid efflux in rat cerebral cortex during ischemia-reperfusion injury. *Brain Research* 2001 Sep;913:156-8.
5. Vinas F, **Pilitsis JG**, Wilner H. Spontaneous resolution of a syrinx. *Journal of Clinical Neuroscience*. 2001 Mar;8:170-2.
6. **Pilitsis JG**, Rengachary SS. The role of vertebroplasty in metastatic spine disease. *Neurosurgical Focus*. 2001 Dec;11:e9.
7. **Pilitsis JG**, Lucas DR, Rengachary SS. Bone healing and spinal fusion. *Neurosurgical Focus*. 2002 Dec;13:e1.
8. Phillis JW, O'Regan MH, Diaz FG, **Pilitsis JG**. Effects of immunosuppressants on free fatty acid efflux in rat cerebral cortex during ischemia-reperfusion injury. *Brain Research* 2002 Dec;957:12-24.
9. **Pilitsis JG**, Diaz FG, O'Regan, Phillis JW. Differential effects of phospholipase inhibitors on free fatty acid efflux in rat cerebral cortex during ischemia-reperfusion injury. *Brain Res* 2002 Sep;951:96-106.
10. **Pilitsis JG**, Coplin WM, O'Regan MH, Wellwood JM, Diaz FG, Fairfax MR, Michael DB, and Phillis JW. Free fatty acids in human cerebrospinal fluid following subarachnoid hemorrhage and their potential role in vasospasm: a preliminary observation. *Journal of Neurosurgery* 2002 Aug;97:272-9.
11. **Pilitsis JG**, Diaz FG, O'Regan MH, Phillis JW. Inhibition of mitochondrial Na⁺/Ca²⁺ exchange by 7-chloro-5-(2-chlorophenyl)-1,5-dihydro-4,1-benzothiazepin-2-(3H)-one attenuates free fatty acid efflux in rat cerebral cortex during ischemia-reperfusion injury. *Neuroscience Letters* 2002 Mar;321:1-4.
12. **Pilitsis JG**, Coplin WM, O'Regan MH, Wellwood JM, Diaz FG, Fairfax MR, Michael DB, Phillis, JW. Free fatty acids in cerebrospinal fluids from patients with traumatic brain injury. *Brain Research* 2003 Oct;349:136-8.
13. **Pilitsis JG**, Coplin WM, O'Regan MH, Wellwood JM, Diaz FG, Fairfax MR, Michael DB, Phillis, JW. Measurement of free fatty acids in cerebrospinal fluids from patients with ischemic and hemorrhagic stroke. *Neuroscience Letters* 2003 Sep;985:198-201.
14. **Pilitsis JG**, Rezai AR, Boulis NM, Henderson JM, Busch RM, Kubu CS. A preliminary study of transient confusional states following bilateral

subthalamic stimulation for Parkinson's disease. *Stereotactic and Functional Neurosurgery*. 2005; 83:67-70.

15. Brown JA, **Pilitsis JG**. Percutaneous balloon compression for the treatment of trigeminal neuralgia: results in 56 patients based on balloon compression pressure monitoring. *Neurosurgical Focus* 2005 May;18:E10.
16. Brown JA, **Pilitsis JG**. Motor cortex stimulation for central and neuropathic facial pain: a prospective study of ten patients and observations of enhanced sensory and motor function during stimulation. *Neurosurgery* 2005 Feb;56:290-7.
17. Brown JA, **Pilitsis JG**. Motor cortex stimulation. *Pain Medicine*. 2006 May;7(Suppl S1):140-5.
18. Lee A, **Pilitsis JG**. Spinal cord stimulation: indications and outcomes. *Neurosurgical Focus* 2006 Dec;21:E3.
19. **Pilitsis JG**, Chu Y, Kordower J, Bergen D, Cochran E, Bakay RAE. Post-mortem study of deep brain stimulation of the anterior thalamus. *Neurosurgery* 2008 Feb; 62:E530-2.
20. **Pilitsis JG**, Verhagen LM, Toleikis JR, Hughes LE, Sani SB, Bakay RAE. Factors involved in long-term efficacy of deep brain stimulation of the thalamus for essential tremor. *Journal of Neurosurgery* 2008 Oct;109:640-6.
21. Wang Y, Cole GA, Su H, **Pilitsis JG**, Fischer GS. MRI compatibility evaluation of a piezoelectric actuator system for a neural interventional robot. *Conf Proc IEEE Eng Med Biol Soc*. 2009;1: 6072-5.
22. Cole G, **Pilitsis JG**, Fischer GS. Design of a Robotic System for MRI-Guided Deep Brain Stimulation Electrode Placement. *IEEE International Conference on Robotics and Automation*. 2009.
23. Burrows A, Moser RP, Weaver JP, Litwin DL, **Pilitsis JG**. Massachusetts health insurance mandate: effects on neurosurgical practice. *Journal of Neurosurgery* 2010 Jan;112:202-7.
24. Burrows AM, Smith TW, Hall W, **Pilitsis JG**. Ascending paralysis from malignant leptomeningeal melanomatosis. *Journal of Neurology Neurosurgery and Psychiatry* 2010 April;81:449-50.
25. Cole G, Harrington K, Su H, Camilo A, **Pilitsis JG**, Fischer GS. Closed-loop actuated surgical system utilizing real-time in situ MRI guidance. *International Symposium on Experimental Robotics* 2010.
26. Peters ML, Burrows A, Ravin P, Novak P, Swearer J, **Pilitsis JG**. Implanted Parkinson's disease patients show better olfaction than those treated medically. *Neurological Bulletin* 2011 Volume 2.

27. Novak P, Przybyszewski A, Barborica A, Ravin P, Margolin L, **Pilitsis JG**. Localization of the subthalamic nucleus in parkinson disease using multi unit activity. *Journal of Neurological Sciences* 2011 Nov;310:44-9.
28. Burrows A, Peters ML, Ravin P, Novak P, Dessureau B, Swearer J, **Pilitsis JG**. Limbic and motor function comparison of deep brain stimulation of the zona incerta and subthalamic nucleus. *Neurosurgery* 2012 Mar;70(1 Suppl Operative):125-30; discussion 130-1.
29. Toleikis JR, Metman LV, **Pilitsis JG**, Barborica A, Toleikis SC, Bakay RA. Effect of intraoperative subthalamic nucleus DBS on human single-unit activity in the ipsilateral and contralateral subthalamic nucleus. *Journal of Neurosurgery* 2012 May; 116(5):1134-43.
30. **Pilitsis JG**, Burrows A, Peters ML, Sargent J, Ng SC, Tseng J. Changing practice pattern of DBS in Parkinson disease and essential tremor in USA. *Stereotactic and Functional Neurosurgery* 2012; 90:25-9.
31. Verhagen Metman L, **Pilitsis JG**, Stebbins GT, Bot M, Bakay RA. Intraoperative x-ray to measure distance between DBS leads: A reliability study. *Mov Disord.* 2012 Jull 27(8): 1056-9.
32. Sutton AC, Yu W, Calos ME, Smith AB, Ramirez-Zamora A, Molho ES, **Pilitsis JG**, Brotchie JM, Shin DS. Deep brain stimulation of the substantia nigra pars reticulata improves forelimb akinesia in the hemiparkinsonian rat. *Journal of Neurophysiology.* 2013 Jan; 109:363-74.
33. **Pilitsis JG**, Atwater B, Warden D, Deck G, Carroll J, Smith J, Chau Ng S, Tseng J. Outcomes in octogenarians with subdural hematomas. *Clinical Neurology and Neurosurgery* 2013 Aug;115:1429-32.
34. Yu W, Calos M, **Pilitsis JG**, Shin DS. Deconstructing the neural and ionic involvement of seizure-like events in the striatal network. *Neurobiology of Disease Journal.* 2013 Apr;52:128-36.
35. Parmar V, Seward C, Huho A, Qian J, Gandhi R, **Pilitsis JG**. Rosai-Dorfman disease presenting as cervical radiculopathy. *Clinical Neurology and Neurosurgery* 2013 Jun;115:808-10.
36. Ramirez-Zamora A, Levine D, Sommer DB, Dalfino J, Novak P, **Pilitsis JG**. Intraparenchymal cyst development after deep brain stimulator placement. *Stereotactic and Functional Neurosurgery* 2013;91:338-41.
37. Smith HS and **Pilitsis JG**. Neuromodulation and palliative medicine. *American Journal of Hospice and Palliative Medicine* 2014 Mar;31:211-9.
38. Yu W, Smith AB, **Pilitsis J**, Shin DS. Isovaline attenuates epileptiform activity and seizure behavior in 4-aminopyridine treated rats. *Epilepsy Research* 2014 Feb;108:331-5.

39. Parmar VK, Gee L, Smith H, **Pilitsis JG**. Supraspinal stimulation for treatment of refractory pain. *Clin Neurol Neurosurg*. 2014 Aug;123C:155-63.
40. Hamani C, **Pilitsis JG**, Rughani AI, Rosenow JM, Patil PG, Slavin K, Abosch A, Eskandar E, Mitchell L, Kalkanis S. Deep brain stimulation for obsessive-compulsive disorder: systematic review and evidence-based guideline sponsored by the American Society for Stereotactic and Functional Neurosurgery (ASSFN) and the Congress of Neurological Surgeons (CNS) and endorsed by the CNS and American Association of Neurological Surgeons (AANS). *Neurosurgery* 2014 Oct;75:327-33.
41. Campbell JC, Jeyamohan SB, De La Cruz P, Chen N, Shin DS, **Pilitsis JG**. Place conditioning to apomorphine in rat models of Parkinson's disease: differences by dose and side-effect expression. *Behavior and Brain Research*. 2014 Dec; 275:114-9.
42. Lobel D A, Kahn M, Rosen CL, **Pilitsis, J**. Medical student education in neurosurgery: elective or essential? *Teaching and Learning in Medicine*. 2015; 27(2):201-4.
43. Tong F, Ramirez Zamora A, Gee L, **Pilitsis JG**. Unusual complications of deep brain stimulation. *Neurosurgical Review*. 2015 Apr;38:245-52.
44. Sutton A, O'Connor K, **Pilitsis JG**, Shin D. Deep brain stimulation of the subthalamic nucleus engages the cerebellum to provide therapeutic efficacy in hemiparkinsonian rats. *Brain Structure and Function*. 2015 Nov; 220:3595-609.
45. Lynch G, Nieto K, Puthenveettil S, Reyes M, Jureller M, Huang JH, Grady MS, Harris OA, Ganju A, Germano IM, **Pilitsis JG**, Pannullo SC, Benzil DL, Abosch A, Fouke SJ, Samadani U. Attrition rates in neurosurgery residency: analysis of 1361 consecutive residents matched from 1990 to 1999. *Journal of Neurosurgery* 2015 Feb;122:240-9.
46. Ramirez Zamora A, Kahn M, De La Cruz P, **Pilitsis JG**. Interleaving programming of subthalamic deep brain stimulation to avoid adverse effects and preserve motor benefit in Parkinson's disease. *Journal of Neurology* 2015 Mar;262:578-84.
47. Li G, Su H, Cole GA, Shang W, Harrington K, Camilo A, **Pilitsis JG**, Fischer GS. Robotic system for MRI-guided stereotactic neurosurgery. *IEEE Transactions in Biomedical Engineering* 2015 Apr; 62:1077-88.
48. Phookan S, Sutton AC, Walling I, Smith A, O'Connor KA, Campbell JC, Calos M, Yu W, **Pilitsis JG**, Brotchie JM. Gap junction blockers attenuate beta oscillations and improve forelimb function in hemiparkinsonian rats. *Experimental Neurology* 2015 Mar;5:160-70.
49. Smith H, Gee L, Kumar V, Ramirez Zamora A, Durphy J, Hanspal E, Barba A, Molho A, Shin D, **Pilitsis JG**. Deep brain stimulation significantly decreases disability from low back pain in patients with advanced Parkinson's disease. *Stereotactic and Functional Neurosurgery* 2015;93:206-11.

50. Smith H, Youn Y, **Pilitsis JG**. Successful use of high frequency spinal cord stimulation following traditional treatment failure. *Stereotactic and Functional Neurosurgery* 2015;93:190-3.
51. De La Cruz P, Gee L, Walling I, Morris B, Chen N, Kumar V, Shin D, **Pilitsis JG**. Treatment of allodynia by occipital nerve stimulation in chronic migraine rodent. *Neurosurgery* 2015 Sep;77:479-85.
52. Gee L, Smith L, Kumar V, Ramirez Zamora A, Durphy J, Hanspal E, Barba A, Molho A, Shin D, **Pilitsis JG**. The influence of bilateral subthalamic nucleus deep brain stimulation on impulsivity and prepulse inhibition in Parkinson's disease patients. *Stereotactic and Functional Neurosurgery* 2015 93:265-70.
53. Gee L, Campbell J, Shin D, **Pilitsis JG**. The effects of subthalamic deep brain stimulation on thermal and mechanical thresholds in O6HAD-lesioned rats. *European Journal of Neuroscience*. 2015 Aug; 42(4):2061-9.
54. De La Cruz P, Fama C, Roth S, Haller J, Willock M, Lange S, **Pilitsis JG**. Predictors of spinal cord stimulation success. *Neuromodulation* 2015 Oct;18:599-602; discussion 602.
55. Yu W, Smith AB, **Pilitsis JG**, Shin DS. Isovaline attenuates generalized epileptiform activity in hippocampal and primary sensory cortices and seizure behavior in pilocarpine treated rats. *Neuroscience Letters* 2015 Jul;599:125-8.
56. Sweet JA, Mitchell LS, Sharan A, Falowski F, Schwalb J, Machado A, Rosenow J, Peterson E, Hayek S, Arle A, Winfree C, **Pilitsis JG**. Occipital Nerve Stimulation for the Treatment of Patients With Medically Refractory Occipital Neuralgia: Congress of Neurological Surgeons Systematic Review and Evidence-Based Guideline. *Neurosurgery*. 2015 Sep;77:332-41.
57. Roth SG, Lange S, Haller J, De La Cruz P, Kumar V, Willock M, Paniccioli S, Briotte M, **Pilitsis JG**. A prospective study of the intra- and postoperative efficacy of intraoperative neuromonitoring in spinal cord stimulation. *Stereotact Funct Neurosurg*. 2015; 93(5): 348-54.
58. Youn Y, Smith H, Morris B, Argoff C, **Pilitsis JG**. The effect of high-frequency stimulation on sensory thresholds in chronic pain patients. *Stereotact Funct Neurosurg*. 2015; 93(5): 355-9.
59. Smith H, Youn Y, Guay RC, Laufer A, **Pilitsis JG**. The role of invasive pain management modalities in the treatment of chronic pain. *Med Clin North Am*. 2016 Jan; 100(1): 103-15.
60. O'Connor KA, Feustel PJ, Ramirez-Zamora A, Molho E, **Pilitsis JG**, Shin DS. Investigation of diazepam efficacy on anxiety-like behavior in hemiparkinsonian rats. *Behav Brain Res*. 2016 Mar 15; 301: 226-37.
61. Ramineni T, Prusik J, De La Cruz P, Gee L, Kumar V, Willock ME, Haller J, Fama C, Patel S, **Pilitsis JG**. The Impact of Peripheral Nerve Stimulation on Disability and Depression. *Neuromodulation*. 2016 Apr; 19(3):306-10.

62. Renfrow JJ, Rodriguez A, Liu A, **Pilitsis JG**, Samadani U, Ganju A, Germano IM, Benzil DL, Wolfe SQ. Positive trends in neurosurgery enrollment and attrition: analysis of the 2000-2009 female neurosurgery resident cohort. *J Neurosurg*. 2016 Mar; 124(3): 834-9.
63. Yu W, Walling I, Smith AB, Ramirez-Zamora A, **Pilitsis JG**, Shin DS. Deep Brain Stimulation of the Ventral Pallidum Attenuates Epileptiform Activity and Seizing Behavior in Pilocarpine-Treated Rats. *Brain Stimul*. 2016 Mar-Apr;9(2):285-95.
64. Przybyszewski A, Ravin P, Szymanski A, **Pilitsis JG**, Szymanski A, Barborica A, Novak, P. Multi-parametric analysis assists in STN localization in Parkinson's patients. *J Neurol Sci*. 2016 Jul 15;366:37-43. Epub 2016 Apr 23.
65. Ramirez-Zamora A, Kaszuba BC, Gee L, Prusik J, Denisi F, Shin D, **Pilitsis JG**. Clinical Outcome and Characterization of Local Field Potentials in Holmes Tremor Treated with Pallidal Deep Brain Stimulation. *Tremor Other Hyperkinet Mov*. 2016 June 30;6:388.
66. Ramirez-Zamora A, Smith H, Youn Y, Durphy J, Shin D, **Pilitsis JG**. Hyperhidrosis associated with subthalamic deep brain stimulation in Parkinson's disease; insights into central autonomic functional anatomy. *J Neurol Sci*. 2016 Jul 15;366:59-64.
67. Ramirez-Zamora A, Boggs H, **Pilitsis JG**. Reduction in DBS frequency improves balance difficulties after Thalamic DBS for Essential Reemor. *J. Neurol Sci*. 2016. *J Neurol Sci*. 2016 Aug 15; 367:122-7.
68. Belasen A, Youn Y, Gee L, Prusik J, Lai B, Ramirez-Zamora A, Rizvi K, Yeung P, Shin DS, Argoff C, **Pilitsis JG**. The Effects of Mechanical and Thermal Stimuli on Local Field Potentials and Single Unit Activity in Parkinson's Disease Patients. *Neuromodulation*. 2016 Oct; 19(7):698-707.
69. 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 Jun; 19(4):429-36.
70. Lange S, Smith H, Prusik J, Fama C, **Pilitsis JG**. Pedometry as an External Measure of Spinal Cord Stimulation Patient Outcomes. *Neuromodulation*. 2016 Jul; 19(5): 482-6.
71. Gee L, 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 Sep; 283(Pt A):298-307.
72. Rubino S, Adepoju A, Kumar V, Prusik J, Murphy N, Owusu-Sarpong S, **Pilitsis JG**. MRI Conditionality in Patients with Spinal Cord Stimulation Devices. *Stereotact Funct Neurosurg*. 2016 Sep 16; 94(4):254-258.

73. Ramirez-Zamora A, Smith H, Kumar V, Phookan S, **Pilitsis JG**. Evolving concepts in Posterior Subthalamic Area Deep Brain Stimulation for Treatment of tremor; Surgical Neuroanatomy and practical considerations. *Stereotactic and Functional Neurosurgery*. 2016 Oct 12;94(5):283-297.
74. Ramirez-Zamora A, Kaszuba B, Gee L, Prusik J, Molho E, Wilock M, Shin D, **Pilitsis JG**. Clinical outcome and intraoperative neurophysiology for focal limb dystonic tremor without generalized dystonia treated with deep brain stimulation. *Clin Neurol Neurosurg*. 2016 Nov; 150:169-176.
75. Kaszuba BC, Walling I, Gee LE, Shin DS, **Pilitsis JG**. Effects of subthalamic deep brain stimulation with duloxetine on mechanical and thermal thresholds in 60HDA lesioned rats. *Brain Res*. 2017 Jan 15; 1655:233-241.
76. Deer TR, Narouze S, Provenzano DA, Pope JE, Falowski SM, Russo MA, Benzon H, Slavin K, **Pilitsis JG**, Alo K, Carlson JD, McRoberts P, Lad SP, Arle J, Levy RM, Simpson B, Mekhail N. The Neurostimulation Appropriateness Consensus Committee (NACC): Recommendations on Bleeding and Coagulation Management in Neurostimulation Devices. *Neuromodulation: Technology at the Neural Interface*. 2017 20 (1): 51-62.
77. Ramirez-Zamora A, Gee L, Youn Y, Shin D, **Pilitsis JG**. Pallidal Deep Brain Stimulation for the treatment of juvenile L-dopa-responsive dystonia and parkinsonism secondary to spatacsin mutation (SPG 11). *JAMA Neurol*. 2017 74(1): 127-128.
78. Belasen A, Rizvi K, Gee L, Yeung P, Prusik J, Ramirez-Zamora A, Hanspal E, Paiva P, Durphy J, Argoff C, **Pilitsis JG**. Effect of low-frequency deep brain stimulation on sensory thresholds in Parkinson's disease. *J Neurosurg*. 2017 Feb; 126(2):397-403.
79. O'Connor KA, Mahoney E, Ramirez-Zamora A, Molho ES, **Pilitsis JG**, Shin DS. Effects of Diazepam and Yohimbine on Neuronal Activity in Sham and Hemiparkinsonian Rats. *Neuroscience*. 2017 351:71-83.
80. Haider S, Owusu-Sarpong S, Peris Celda M, Wilock M, Prusik J, Youn Y, **Pilitsis JG**. A Single Center Prospective Observational Study of Outcomes with Tonic Cervical Spinal Cord Stimulation. *Neuromodulation*. 2017 Apr; 20(3):263-268.
81. Marola O, Cherala R, Prusik J, Kumar V, Fama C, Wilock M, Crimmins J, **Pilitsis JG**. BMI as a Predictor of Spinal Cord Stimulation Success in Chronic Pain Patients. *Neuromodulation*. 2017 Apr;20(3):269-273.
82. Prusik J, Argoff C, Peng S, **Pilitsis JG**. Use of Low Dose Ziconotide as First-Line Intrathecal Monotherapy. *Neuromodulation*. 2017 Jun; 20(4):386-391.
83. Chockalingam A, Belasen A, Chen N, Ramirez-Zamora A, Youngwon Y, Feustel P, Wilock ME, Shin D, **Pilitsis JG**. Effect of eye opening on Single-unit activity and local Field potentials in the subthalamic nucleus. *Neuromodulation*. 2017 Jul;20(5):471-477.

84. Eijkholt M, Cabrera LY, Ramirez-Zamora A, **Pilitsis JG**. Shaking Up the Debate: Ensuring the Ethical Use of DBS Intervention Criteria for Mid-Stage Parkinson's Patients. *Neuromodulation*. 2017 Jul; 20(5) 411-416.
85. Peng S, Levine D, Ramirez-Zamora A, Chockalingam A, Feustel PJ, Durphy J, Hanspal E, Novak P, **Pilitsis JG**. A Comparison of Unilateral Deep Brain Stimulation(DBS), Simultaneous Bilateral dBs, and Staged Bilateral DBS Lead Accuracies. *Neuromodulation*. 2017 Jul; 20(5): 478-483.
86. Owusu S, Huynh A, Gruenthal E, Prusik J, Owusu-Sarpong S, Cherala R, Peng S, **Pilitsis JG**, McCallum SE. Prospective Evaluation of Patient Usage of above and Below Threshold Waveforms With Traditional Spinal Cord Stimulation Devices. *Neuromodulation*. 2017 Aug; 20(6): 567-574.
87. Collison C, Prusik J, Paniccioli S, Briotte M, Grey R, Feustel P, **Pilitsis JG**. Prospective Study of the Use of Intraoperative Neuromonitoring in Determining Post-Operative energy Requirements and Physiologic Midline in Spinal Cord Stimulation. *Neuromodulation*. 2017 Aug; 20(6): 575-581.
88. Nycz CJ, Gondokaryono R, Carvalho P, Patel N, Wartenberg M, **Pilitsis JG**, Fischer GS. Mechanical Validation of an MRI Compatible Stereotactic Neurosurgery Robot in Preparation for Pre-Clinical Trials. *Rep US*. 2017 Sep;1677-1684.
89. Waling I, Smith H, Gee LE, Kaszuba B, Chockalingam A, Barborica A, Donos C, Shin ds, **Pilitsis JG**. Occipital nerve Stimulation Attenuates Neuronal Firing Response to Mechanical Stimuli in the Ventral Posteromedial Thalamus of a Rodent Model of Chronic Migraine. *Neurosurgery*. 2017 Oct 1; 81(4): 696-701.
90. Holtzheimer P, Husain MM, Lisanby SH, Taylor SF, Whitworth LA, McClintock S, Slavin KV, Berman J, McKhann GM, Patil PG, Rittberg BR, Abosch A, Pandurangi AK, Holloway KL, Lam RW, Honey CR, Neimat JS, Henderson JM, DeBattista C, Rothschild AJ, **Pilitsis JG**, Espinoza RT, Petrides G, Mogilner AY, Matthews K, Peichel D, Gross R, Hamani C, Lozano AM, Mayberg HS. Subcallosal cingulate deep brain stimulation for treatment-resistant depression: a multi-site, randomized, sham-controlled trial. *The Lancet Psychiatry*. 2017 Nov; 4(11):839-849.
91. Paul AR, Kumar V, Roth s, Gooch MR, **Pilitsis JG**. Establishing Minimal Clinically Important difference of Spinal Cord Stimulation Therapy in Post-Laminectomy Syndrome. *Neurosurgery*. 2017 Dec 1; 81(6): 1011-1015.
92. Khan H, **Pilitsis JG**, Prusik J, Smith H, McCallum SE. Pain Remission at One-Year Follow-Up With Spinal Cord Stimulation. *Neuromodulation*. 2018 Jan; 21(1): 101-105.
93. Ghoshal G, Gee L, Heffter T, Williams E, Bromfield C, Rund L, Ehrhardt JM, Diederich CJ, Fischer G, **Pilitsis JG**, Burdette EC. A minimally invasive catheter based ultrasound therapy for the brain. *Neurosurg Focus*. 2018 Feb; 44(2): E13.
94. MacDonell J, Patel N, Rubino S, Ghoshal G, Fischer G, Burdette EC, Hwang R, **Pilitsis JG**. Magnetic Resonance Guided Interstitial High Intensity Focused Ultrasound for Brain Tumor Ablation. *Neurosurg Focus* 2018 Feb; 44(2): E11.

95. Lipsman N, Elias J, Gwinn RP, **Pilitsis JG**. Focused ultrasound. *Neurosurg Focus*. 2018 Feb; 44(2): E1.
96. Budman E, Deeb W, Martinez-Ramirez D, **Pilitsis JG**, Peng-Chen Z, Okun MS, Ramirez-Zamora A. Potential indications for deep brain stimulation in neurological disorders: an evolving field. *Eur J Neurol*. 2018 Mar; 25(3): 434-e30.
97. Fiveland E, Prusik J, Linton R, Ashe J, **Pilitsis J**, Hancu I. EKG-based detection of deep brain stimulation (DBS) for fMRI studies. *Magn Reson Med*. 2018 Apr; 79(4):2432-39.
98. Mahoney EC, Zeng A, Yu W, Rowe M, Sahai S, Feustel PJ, Ramirez-Zamora A, **Pilitsis JG**, Shin DS. Ventral pallidum deep brain stimulation attenuates acute partial, generalized and tonic-clonic seizures in two rat models. *Epilepsy Res*. 2018 May; 142: 36-44.
99. Ramirez-Zamora A, Eisinger RS, Haider SA, Youn Y, **Shin D**, Molho ES, **Pilitsis JG**. Pallidal deep brain stimulation and intraoperative neurophysiology for treatment of poststroke hemiballism. *Ann Clin Transl Neurol*. 2018 May 21; 5(7):865-869.
100. Huang Y, Aronson JP, **Pilitsis JG**, Gee L, Durphy J, Molho ES, Ramirez-Zamora A. Anatomical correlates of uncontrollable laughter with unilateral subthalamic deep brain stimulation in Parkinson's disease. *Frontiers in Neurology, section Movement Disorders*. 2018 may 25; 9:341.
101. Khan H, Kumar V, Ghulam-Jelani Z, McCallum S, Hobson E, Sukul V, **Pilitsis JG**. Safety of spinal cord stimulation in patients who routinely use anticoagulants. *Pain Medicine Journal*. Accepted for Publication; Nov 2017. doi: 10.1093/pm/pnx305. [Epub ahead of print]
102. Kumar V, Prusik J, Lin Y, Hwang R, Feustel P, **Pilitsis JG**. Efficacy of Alternating Conventional Stimulation and High Frequency Stimulation in Improving Spinal Cord Stimulation Outcomes: A Pilot Study. *Neuromodulation*. 2018 Feb 5. [Epub ahead of print]
103. Youn Y, Hellman a, Walling I, Geer L, Qian J, Burdette C, Frith L, **Pilitsis JG**. High-Intensity Ultrasound Treatment for Vincristine-Induced Neuropathic Pain. *Neurosurgery*. 2018 Feb 9. [Epub ahead of print]
104. Gee L, Smith HC, Ghulam-Jelani Z, Khan H, Prusik J, Feustel PJ, McCallum Se, **Pilitsis JG**. Spinal Cord Stimulation for the Treatment of Chronic Pain Reduces Opioid Use and Results in Superior Clinical Outcomes When Used Without Opioids. *Neurosurgery*. 2018 Mar 12 [Accepted for Publication].
105. DiMarzio M, **Pilitsis JG**, Gee L, Peng S, Prusik J, Durphy J, Ramirez-Zamora A, Hanspal E, Molho E, McCallum SE. King's Parkinson's Disease Pain Scale for Assessment of Pain Relief Following Deep Brain Stimulation for Parkinson's Disease. *Neuromodulation*. 2018 Apr 2. [Epub ahead of print]

106. MacDonell J, Patel N, Fischer G, Burdette EC, Qian J, Chumbalkar V, Ghoshal G, Heffter T, Williams E, Gounis M, King R, Thibodeau J, Bogdanov G, Brooks OW, Langan E, Hwang R, **Pilitsis JG**. Robotic Assisted MRI-Guided Interventional Interstitial MR Guided Focused Ultrasound Ablation in a Swine Model. *Neurosurgery*. 2018 April 20. [Accepted for publication.]
107. Deer TR, Pope J, Lamer TJ, Grider JS, Provenzano D, Lubenow TR, FitzGerald JJ, Hunter C, Falowski S, Sayed D, Baranidharan G, Patel NK, Davis T, Green A, Pajuelo A, Epstein LJ, Harned M, Liem L, Christo PJ, Chakravarthy K, Gilmore C, Huygen F, Lee E, Metha P, Nijhuis H, Patterson DG, Petersen E, **Pilitsis JG**, Rowe JJ, Rupert MP, Skaribas I, Sweet J, Verrills P, Wilson D, Levy RM, Nagy Mekhail N. The Neuromodulation Appropriateness Consensus Committee (NACC) on Best Practices for Dorsal Root Ganglion Stimulation. *Neuromodulation: Technology at the Neural Interface*. [Accepted for publication May 2018.]
108. Prabhala T, Hellman A, Walling I, Maietta T, Qian J, Burdette C, Neubauer P, Shao M, Stapleton A, Thibodeau J, **Pilitsis JG**. External Focused Ultrasound Treatment for Neuropathic Pain Induced by Common Peroneal Nerve Injury. *Neurosci Lett*. [Accepted for publication July 2018.]

Other Journal Articles

1. **Pilitsis JG** and Brisson P. The Use of Argon Beam Coagulation in Management of Bleeding from an Ulcerated Breast Lesion. *The Breast Journal* 5: 267-271, 1999.
2. **Pilitsis JG** and Rengachary SS. Complications of head injury. *Neurological Research* 23: 227-36, 2001.
3. Vinas F and **Pilitsis JG**. Penetrating Head Injury. *eMedicine Journals: Medicine, Ob/Gyn, Psychiatry, and Surgery*. 2:5, 2001.
4. **Pilitsis JG**, Bakay RAE. Deep brain stimulation for Parkinson's disease. *Contemporary Neurosurgery*, Vol 29, 2007.
5. **Pilitsis JG**, Bakay RAE. Deep brain stimulation for psychiatric disorders. *Psychopharm Review*; Vol 42, 2007
6. **Pilitsis JG**, Parmar V, Jeyamohan SB. Expanding Your Pain Practice. *Contemporary Neurosurgery*. 34:19, Sept 2012
7. **Pilitsis JG**, Beverly S, Mazzola C, Ashley Jr. W, Colen C, Asadi K and Steinmetz M. Neurosurgeon and Student Perspective on the Current Medical Education in Neurosurgery. *AANS Neurosurgeon*: Vol 22, number 2, 2013.
8. Sedney C, de La Cruz P, Swartz K, **Pilitsis JG**. CSNS and Its Socioeconomic Publications. *AANS Neurosurgeon*: Vol 22, number 3, 2013.
9. **Pilitsis JG**, Blais MB, Cruz C, Shaikh S, Cocchiarella A, Peters ML, de La Cruz PM,

Hudlin M. A Prospective Study of a Communication Initiative in a Neurosurgical OR
AANS Neurosurgeon: Vol 22, number 3, 2013.

10. Prusik J, **Pilitsis JG**. NYS Medicaid and Intrathecal Pumps. CNS Quarterly. Spring 2014.
11. Prusik J, **Pilitsis JG**. The Three Greatest Recent Innovations in Pain. AANS Neurosurgeon. June 2014.
12. Taplin, AM, Campbell, JC, Smith, H, Parmar VK, **Pilitsis, JG** Neuromodulation of pain. Public Health and Emergency. July 2016.
13. Taplin, AM, Campbell, JC, Smith, H, Parmar, VK, **Pilitsis, JG** Neuromodulation for end of life symptoms. Public Health and Emergency. July 2016.
14. Jeyamohan S, MacMahon P, Smith HS, **Pilitsis JG**. Neurosurgical options. Public Health and Emergency. August 2016.
15. Ramirez Zamora A., Campbell J.C., Parmar V, **Pilitsis JG**. Fatigue and sleep difficulties. Public Health and Emergency. August 2016.

Chapters

1. **Pilitsis JG**, O'Regan MH, and Phillis JW. The role of Na⁺/H⁺ exchange during ischemia-reperfusion injury in heart and brain. In: Recent Research Developments in Neurochemistry. (Ed) SG Pandalai, Research Signpost, India, 5 2002.
2. Phillis JW, **Pilitsis JG**, and O'Regan MH. The potential role of the Na⁺/H⁺ exchanger in ischemia/reperfusion injury of the central nervous system. In: The Sodium-Hydrogen Exchange. From Molecule to its Role in Disease, M. Karmazyn, Ed. Kluwer Academic Publishers, 2003.
3. **Pilitsis JG**, Bakay RAE The future of deep brain stimulation in: Deep Brain Stimulation in Neurological and Psychiatric Disorders, Eds. Tarsy, Okun, Starr, and Vitek; Humana; Totowa, NJ, 2008.
4. **Pilitsis JG**, Bakay RAE. Novel neuromodulation strategies in Alzheimers and other neurodegenerative disorders in: Textbook of Neuromodulation Eds. Krames E, Peckham PH, Rezai A; Blackwell; Boston; March 2009.
5. Sierens D, Kutz S, **Pilitsis JG**, Bakay RAE. Stereotactic surgery with microelectrode recordings in: Movement Disorders: The Essentials. Ed. Bakay RAE; Thieme; New York ; August 2008.
6. **Pilitsis JG**, Lozano AM, Bakay RAE. Stimulating and Ablative Procedures for Parkinson's Disease in: CNS Regeneration: Basic Science and Clinical Advances, 2nd edition; Eds. Tuszynski M, Kordower J; Elsevier San Diego, 2008.
7. Brown JA, **Pilitsis JG**. Percutaneous Balloon Compression for the Treatment of Trigeminal Neuralgia. Neurosurgical Operative Atlas 2E: Functional Neurosurgery,

Eds. Starr P, Barbaro N, Larson P. Thieme, New York , 2009.

8. Cataltepe O, **Pilitsis JG**. "Implantation of strip, grid and depth electrodes for invasive electrophysiological monitoring", *Pediatric Epilepsy Surgery: Preoperative assessment and surgical treatment*. Cataltepe O, Jallo G (eds), Thieme: NY, 2010.
9. Ramirez Zamora A., Campbell J.C., Parmar V., **Pilitsis JG**. Fatigue and sleep in the palliative care population. In HS Smith, **JG Pilitsis** (Eds.), *The Art and Science of Palliative Medicine*. Hong Kong, China: AME Publishing Company, 2014.
10. Taplin, A. M., Campbell, J. C., Smith, H., Parmar, V. K., & **Pilitsis, JG** Neuromodulation for end of life symptoms. In HS Smith, **JG Pilitsis** (Eds.), *The Art and Science of Palliative Medicine*. Hong Kong, China: AME Publishing Company, 2014.
11. Taplin, A. M., Campbell, J. C., Smith, H., Parmar, V. K., & **Pilitsis, JG** Neuromodulation for pain in palliative care. In HS Smith, **JG Pilitsis** (Eds.), *The Art and Science of Palliative Medicine*. Hong Kong, China: AME Publishing Company, 2014.
12. Jeyamohan S., MacMahon P., Smith H.S., **Pilitsis J.G.** Neurosurgical options. In HS Smith, **JG Pilitsis** (Eds.), *The Art and Science of Palliative Medicine*. Hong Kong, China: AME Publishing Company, 2014.
13. DeLaCruz P, Plakas C, **Pilitsis JG**. Deep Brain Stimulation for Parkinson Disease. In R. Harbaugh (Ed.), *Neurosurgery Maintenance of Certification*. Thieme, 2015
14. Phookan S, Plakas C, **Pilitsis JG**. Deep Brain Stimulation for Essential Tremor. In R. Harbaugh (Ed.), *Neurosurgery Maintenance of Certification*. Thieme, 2015
15. Keating S, Plakas C, **Pilitsis JG**. Spinal Cord Stimulation for Failed Back Surgery Syndrome. In R. Harbaugh (Ed.), *Neurosurgery Maintenance of Certification*. Thieme, 2015
16. Lange S, Wilock M, **Pilitsis JG**: Urgent pain issues; In Ed C Argoff, G McCleane (Eds), *Pain Management Secrets 3E*, New York, Elsevier, 2015.
17. Kumar V, **Pilitsis JG**: Spinal Cord Stimulation; In Ed C Argoff, G McCleane (Eds), *Pain Management Secrets 3E*, New York, Elsevier, 2015
18. Youn Y, Smith H, **Pilitsis JG**. Failed Back Surgery Syndrome In Eds. Falkowski S, Pope J *Integrating Pain Treatment into Your Spine Practice*, Springer, 2016; 19-28.
19. Smith H, Youn T, Laufer A, **Pilitsis JG**. The Role of Invasive Pain Management in America: Chronic pain management. In *The Medical Clinics of North America*, 2016; 100: 103-15.
20. Lange S, Youn Y, Gannon S, Prusik J, **Pilitsis JG**. Urgent Issues in Pain. In: Argoff C, Dubin A, **Pilitsis JG** (Eds). *Pain Management Secrets 4th Edition*. Elsevier. 2018; 43-45.

21. Lange S, Bemis A, Prusik J, Pilitsis JG. Trigeminal Neuralgia. In: Argoff C, Dubin A, **Pilitsis JG** (Eds). Pain Management Secrets 4th Edition. Elsevier. 2018; 87-88.
22. Gruenthal E, **Pilitsis JG**. Substance Abuse in Chronic Pain. In: Argoff C, Dubin A, **Pilitsis JG** (Eds). Pain Management Secrets 4th Edition. Elsevier. 2018; 172-176.
23. Kumar V, Gannon S, **Pilitsis JG**. Spinal Cord Stimulation in Treatment of Pain. In: Argoff C, Dubin A, **Pilitsis JG** (Eds). Pain Management Secrets 4th Edition. Elsevier. 2018; 249-250.
24. Walling I, Willock M, **Pilitsis JG**. Complementary and Alternative Medicine. In: Argoff C, Dubin A, **Pilitsis JG** (Eds). Pain Management Secrets 4th Edition. Elsevier. 2018; 268-272.
25. Gooch MR, Adepoju A, **Pilitsis JG**. Spinal Cord Stimulation. In Ed. George Samandouras, Masters of Neurosurgery; Advanced Limited Learning. In Press 2018
26. Riccio A, Peris Celda M, **Pilitsis JG**; Deep Brain Stimulation. In Ed. George Samandouras. Masters of Neurosurgery; Advanced Limited Learning. In Press 2018
27. Kumar V, **Pilitsis JG**; Deep brain stimulation innovations In Ed Goodman R; Surgery in Parkinson Disease; Springer. In Press 2018
28. Kumar V, **Pilitsis JG**: Deep brain stimulation complication avoidance in Ed Goodman R; Surgery in Parkinson Disease; Springer. In Press 2018
29. Haider S, Lange S, **Pilitsis JG**: Complication Avoidance and Revision Surgery; In Ed Mammis A, Spinal Cord Stimulation: Principles and Practice” In press 2018.
30. Field NC, **Pilitsis JG**. Trigeminal Neuropathic Pain. In: Levin E, **Pilitsis JG**, Sagher O (Eds). Cases in Pain Neurosurgery. Oxford University Press. In Press.
31. Njoku I, **Pilitsis JG**. Post-Stroke Intractable Pain. In: Levin E, **Pilitsis JG**, Sagher O (Eds). Cases in Pain Neurosurgery. Oxford University Press. In Press.
32. Cheyuo C, Hwang RS. **Pilitsis JG**. Occipital Nerve Stimulation for Chronic Refractory Migraine. In: Levin E, **Pilitsis JG**, Sagher O (Eds). Cases in Pain Neurosurgery. Oxford University Press. In Press.
33. Shields J, Lange S, **Pilitsis JG**. Surgery for Parkinson’s Disease. In: Brown JA, Pilitsis JG, Schulder M (Eds). Functional Neurosurgery: The Essentials. Thieme Publishers. In Press.
34. Dierkes J, **Pilitsis JG**, Falowski S. Deep Brain Stimulation. In: Deer T, Pope J, Lamer T, Provenzano D (Eds). Deer’s Treatment of Pain: An Illustrated Guide. Springer Publishers. In Press.
35. Cataltepe O, **Pilitsis J**. Implantation of Strip, Grid, and Depth Electrodes for Invasive Electrophysiological Monitoring. In: Cataltepe O, Jallo G (Eds). Pediatric Epilepsy Surgery: Preoperative Assessment and Surgical Treatment. 2nd Ed. In Press.

Comments for Publication

Pilitsis JG, Fessler RD, Comments on: Ammar K et al; Anatomic Landmarks for the Cervical Portion of the Thoracic Duct. *Neurosurgery*. 53:1385-1388, 2003.

Pilitsis JG, Bakay RAE. Comments for publication on Hodaie M, Neimat J, Lozano AM. The dopaminergic nigrostriatal system and Parkinson's Disease: molecular events in development, disease, and cell death and therapeutic strategies. *Neurosurgery* 2007; 60: 29-30.

Pilitsis JG, Bakay RAE Comments for publication on Blomstedt P, Olivecrona M, Sailer A, Hariz AI. Dittmar and the history of stereotaxy; or rats, rabbits and references. *Neurosurgery* 2007; 60: 201

Pilitsis JG, Bakay RAE Comments for publication on Moyer JT, Danish SF, Keating JG, Finkel LH, Baltuch GH, Jaggi JL. Implementation of dual simultaneous microelectrode recording systems during deep brain stimulation surgery for Parkinson's disease: technical note. *Neurosurgery* 2007; 60: ONS-E178

Pilitsis JG, Bakay RAE Comments for publication on Woerdeman PA, Willems PWA, Noordmans HJ, van der Sprenkel JW, Barkelbach M. The effect of repetitive manual fiducial localization on target localization in image space. *Neurosurgery* 2007; 60:104

Pilitsis JG, Bakay RAE Comments for publication on Levy R, Lozano AM, Hutchinson WD, Dostrovsky JO. Dual microelectrode technique for deep brain stereotactic surgery in humans. *Neurosurgery* 2007; 60: ONS284

Pilitsis JG, Bakay RAE Comments for publication on Tir M, Devos D, Blond S et al. Exhaustive, one year follow-up of subthalamic nucleus deep brain stimulation in a large single center cohort of Parkinsonian patients. *Neurosurgery* 2007; 61: 297-305.

Pilitsis JG, Bakay RAE. Comments for publication on Tabbal SD, Revilla FJ, Mink JW et al. Safety and efficacy of subthalamic nucleus deep brain stimulation performed with limited intraoperative mapping for treatment of Parkinson's disease. *Neurosurgery* 2007; 61: ONS 119-129. *Neurosurgery*. 61(2):329-337, August 2007.

Pilitsis JG, Bakay RAE. Comments for publication on De Beaumont, L, Lasseigne, M.; Leclerc, S.; Theoret, HD. Long term and cumulative effects of sports concussion on motor cortex inhibition. *Neurosurgery* 61: 329-337, 2007.

Pilitsis JG, Bakay RAE. Comments for publication on Deogaonkar, M, Walter, BL, Boulis, N; Starr, P. Clinical Problem Solving: Finding the Target. *Neurosurgery*. 61:815-825, 2007.

Pilitsis JG, Bakay RAE. Comments for publication on Patel NK, Plaha P, Gill S. Magnetic Resonance Imaging Directed Method for Functional Neurosurgery using Implantable Guide Tubes. *Neurosurgery*. 61 Suppl 2:358-366, 2007.

Pilitsis JG, Bakay RAE. Comments for publication on Baker KB, Koppell BH, Malone D et al. Deep brain stimulation for obsessive compulsive disorder: Using functional

magnetic resonance imaging and electrophysiological techniques: technical case report. Neurosurgery 2007 61: ONSSE367-368.

Pilitsis JG, Bakay RAE: Comments for publication on Temel Y, Wilbrink P, Duits A, et al. Single electrode and multiple electrode guided electrical stimulation of the subthalamic nucleus in advanced Parkinson's Disease. Neurosurgery 2007; 61: ONS346-ONS357.

Pilitsis JG, Bakay RAE. Comments for publication on Olstorn H, Moe MC, Roster GK, et al. Transplantation of stem cells from the adult human brain to the adult rat brain. Neurosurgery 2007; 60: 1089-1099.

Pilitsis JG, Bakay RAE: Comments for publication on Lipsman N, Neimat JS, Lozano AM. Deep brain stimulation for treatment refractory obsessive-compulsive disorder: the search for a valid target. Neurosurgery 2007; 61: 1-13.

Pilitsis JG, Bakay RAE: Comments for publication on Tenti, G, Sivaloganathan, S, Drake, J. Mathematical Modeling of the brain: principles and challenges. Neurosurgery. 62:1146-1157, 2008.

Pilitsis JG, Bakay RAE: Comments for publication on Spiotta, AM, Bain, MD, Deogaonkar, M et al. Methods of scalp revision for Deep brain stimulator hardware: Case report. Neurosurgery. 62: Supplement 1:249-250, 2008.

Pilitsis JG, Bakay RAE: Comments for publication on Heuer, GG, Zaghloul, KA, Jaggi, J, Baltuch, GH. Use of an integrated platform system in the placement of deep brain stimulators. Neurosurgery. 62 Supplement 1:245-248, 2008.

Pilitsis JG, Bakay RAE: Comments for publication on Location of active contacts in patients with primary dystonia treated with globus pallidus deep brain stimulation. Hamani, C, Moro, E, Zadikoff, C, et al. Neurosurgery. 62 Supplement 1:217-225, 2008

Pilitsis JG, Bakay RAE: Comments for publication on Hartov A, Roberts D, Paulsen K. A comparative analysis of coregistered ultrasound and magnetic resonance imaging in neurosurgery. Neurosurgery 62: Suppl1: 91-101, 2008.

Pilitsis JG, Bakay RAE: Comments for publication on Sillay K, Larson P, Starr P. Deep Brain Stimulator Hardware Related Infections: Incidence and management in a large series. Neurosurgery 62: 360-7, 2008.

Pilitsis JG, Bakay RAE: Comments for publication on Guridi J, Obeso JA, Rodriguez-Oroz M, Lozano A, Manrique M. L-Dopa induced dyskinesia and stereotactic surgery for Parkinson's Disease. Neurosurgery 62: 360-7, 2008.

Riccio A, **Pilitsis JG**: Comments for Publication on: Thalamotomy-like Effects From Partial Removal of a Vim Deep Brain Stimulator Lead in a Patient With Essential Tremor; Neurosurgery 2015.

Gooch M, **Pilitsis JG**. Commentary: Percutaneous Balloon Compression vs. Percutaneous Retrogasserian Glycerol Rhizotomy for the Primary Treatment of Trigeminal Neuralgia. *Neurosurgery*. 2016 Sep;79(3): E514.

Hwang R, **Pilitsis JG**: Comments for Publication on: Quality of life after motor cortex stimulation: Clinical results and systematic review of the literature. *Neurosurgery* 2018.

Hwang R, **Pilitsis JG**: Comments for Publication on: Ultrahigh-Magnitude Brain Magnetic Resonance Imaging Scan on Rhesus Monkeys With Implanted Deep Brain Stimulation Hardware. *Neuromodulation* 2018.

Abstracts

1. Michael D, **Pilitsis JG**, and Walker PD. The Effects of Ethanol and Drugs of Abuse on Immediate Early Gene Expression Following Traumatic Brain Injury. *Soc Neurosci Abst* 1999.
2. Michael D, **Pilitsis JG**, Underwood BD, Walker PD, and Dutcher SA. The Effects of Ethanol on Heat Shock Protein Expression Following Traumatic Brain Injury. *Soc Neurosci Abst* 2000.
3. **Pilitsis JG**, Diaz FG, Wellwood J, O'Regan MH, Fairfax MR, Phillis JW, and Coplin WM. Quantification of free fatty acids in human cerebrospinal fluid: identification of markers for neurological diseases. *Soc Neurosci Abst* 2001.
4. **Pilitsis JG**, Diaz FG, O'Regan MH, and Phillis JW. Inhibition of Na⁺/H⁺ exchange and Na⁺/Ca⁺⁺ exchange attenuates free fatty acid efflux during ischemia-reperfusion injury in rat cerebral cortex. *Soc Neurosci Abst* 2001.
5. **Pilitsis JG**, Coplin WM, Wellwood JM, O'Regan MH, Diaz FG, Michael DB, Fairfax MR, and Phillis JW. CSF Free Fatty Acid concentrations and outcome after traumatic brain injury. *Soc Neurosci Abst* 2003.
6. Brown JA, **Pilitsis JG**. Percutaneous balloon compression for trigeminal neuralgia. *Neurosurgery* 57(2):414, August 2005.
7. Gilmer-Hill H, **Pilitsis JG**, Kowaleski JL, Rozzelle A, Canady AI. Management of Deformational Plagiocephaly: A Randomized, Prospective Analysis: *Neurosurgery*. 57(2):433, August 2005
8. Przybyszewski WA, **Pilitsis JG**, Margolin L, Barborica A, Ravin P, Novak P. Multi-parametric analysis assists in STN localization in Parkinson patients. The 7th International Congress of Mental Dysfunction & Other Non-motor features in Parkinson disease. MDPD 2010, Barcelona, abstract.
9. Patel N, Li G, Bogdanov G, Hefter T, Komadina B, Williams E, Ludwig R, **Pilitsis JG**, Burdette EC, Fischer GS. Monitoring and Control of iMRI-guided Robot-assisted Conformal Brain Tumor Ablation. 11th Interventional MRI Symposium. October 7-8, 2016. Baltimore, MD. Abstract Presentation..

10. **Pilitsis J**, Barolat G, Rosenow J, Brennan J, Bailey A, Epstein J, Hammond B, Metzger C, Huynh D, Lechleiter K, Mekel-Bobrov N. Spinal Cord Stimulation (SCS) Clinical Outcomes using a New 32-Contact Surgical Lead Coupled with a Novel Anatomically-Guided (3D) Neural Targeting Algorithm for the Treatment of Low Back Pain: Interim Results of a Multicenter, Real-World Clinical Study. American Association of Neurological Surgeons. April 22-26, 2017. Los Angeles, CA. Abstract Presentation.
11. Fiveland E, Prusik J, Linton R, Ashe J, **Pilitsis J**, Hancu I. "EKG-Based Detection of Deep Brain Stimulation (DBS) for fMRI Studies", Proc Int Soc Magn Reson Med 25th Meeting, Honolulu, Hawaii, 4423, 2017. Abstract Presentation.
12. Schulte R, Ashe J, Ranjan S, Prusik J, **Pilitsis JG**, Hayes S, Menini A, Wiesinger F, Hancu I. Improved Localisation of DBS Electrodes using pseudo-Positive Contrast from a Zero-Echo-Time Acquisition. ISMRM 2017, April 22-27, 2017. Honolulu, Hawaii..Abstract Presentation.
13. Hellman A, Marietta T, Ghoshal G, Neubauer P, Burdette C, **Pilitsis JG**. Evaluation of thermal changes needed for focused ultrasound modulation of neuropathic pain. American Society for Stereotactic and Functional Neurosurgery 2018 Biennial Meeting. Denver, CO. June 2-5, 2018. Abstract Presentation.
14. DiMarzio M, Madhavan R, Joel S, Hancu I, Fiveland E, Prusik J, Gillogly M, Ashe J, Rashid T, Telkes I, Durphy J, Hwang R, Hanspal E, **Pilitsis JG**. Do effects of DBS on network activity in Parkinson's disease vary based on phenotype? American Society for Stereotactic and Functional Neurosurgery 2018 Biennial Meeting. Denver, CO. June 2-5, 2018. Abstract Presentation.
15. DiMarzio M, Hancu I, Fiveland E, Prusik J, Gillogly M, Joel S, Madhavan R, Durphy J, Molho E, Hanspal E, Shin D, **Pilitsis JG**. Can DBS modulate network activity to relieve pain in Parkinson's disease? American Society for Stereotactic and Functional Neurosurgery 2018 Biennial Meeting. Denver, CO. June 2-5, 2018. Abstract Presentation.
16. Ramani S, Schulte R, McKinnon G, Ashe J, **Pilitsis J**, Hancu I. Accurate localization of individual DBS contacts by MRI using zero-TE phase images. Abstract. Joint Annual Meeting of ISMRM-ESMRMB in Paris, France on June 16-21, 2018,
17. Hancu I, Madhavan R, Boutet A, Ranjan M, Prusik J, Ashe J, Xu D, Kalia S, Hodaie M, Fasano A, Kucharczyk W, **Pilitsis J**, Lozano A. On the (non-)equivalency of monopolar and bipolar settings for deep brain stimulation fMRI studies of Parkinson's disease patients. Abstract. Joint Annual Meeting of ISMRM-ESMRMB in Paris, France on June 16-21, 2018
18. Madhavan R, Joel S, Saha S, Hancu I, DiMarzio M, Fiveland E, Prusik J, Gillogly M, Ashe J, Durphy J, **Pilitsis J**. Functional MRI can distinguish between optimal and non-optimal frequencies in PD-DBS. Abstract. Joint Annual Meeting of ISMRM-ESMRMB in Paris, France on June 16-21, 2018.
19. DiMarzio M, Hancu I, Fiveland E, Prusik J, Madhavan R, Joel S, Gillogly M, Ashe J, Rashid T, Durphy J, Hwang R, **Pilitsis J**. Use of Functional MRI to assess the

differences of STN and GPI Deep Brain Stimulation in Parkinson Disease. Abstract. Joint Annual Meeting of ISMRM-ESMRMB in Paris, France on June 16-21, 2018

Presentations

1. Boulos A., **Pilitsis JG**, Moza K, Hlavac PJ, Henson S, Tramner BI, and Popp AJ (poster presentation at AANS 1998) The Sensitivity of New Generation Computed Tomography in Detecting Subarachnoid Hemorrhage Secondary to Angiographically Evident Lesions.
2. **Pilitsis JG**, Michael DB, and Walker PD. (Congress of Neurological Surgeons- oral presentation- November 1999) The Effects of Ethanol and Drugs of Abuse on Immediate Early Gene Expression Following Traumatic Brain Injury.
3. Dutcher SA, **Pilitsis JG**, Underwood BD, Walker PD, and Michael D. (Congress of Neurological Surgeons- poster presentation- October 2000) The Effects of Ethanol on Heat Shock Protein Expression Following Traumatic Brain Injury.
4. **Pilitsis JG**, Diaz FG, O'Regan MH, and Phillis JW. (Congress of Neurological Surgeons – oral presentation – October 2001). Inhibition of Na⁺/H⁺ exchange and Na⁺/Ca⁺⁺ exchange attenuates free fatty acid efflux during ischemia-reperfusion injury in rat cerebral cortex.
5. **Pilitsis JG**, Diaz FG, O'Regan MH, Michael DB, Fairfax MR, Wellwood JM, Phillis JW, and Coplin WM. (World Federation of Neurosurgical Societies – oral presentation – September 2001) Free Fatty Acids in Subarachnoid Hemorrhage: Markers of Secondary Injury.
6. **Pilitsis JG**, Diaz FG, O'Regan MH, and Phillis JW. (Joint Section of Cerebrovascular Surgery – oral presentation – February 2002). Inhibition of mitochondrial Na⁺/Ca⁺⁺ exchange by CGP-37157 attenuates free fatty acid efflux during ischemia-reperfusion injury in rat cerebral cortex.
7. **Pilitsis JG**, Diaz FG, O'Regan, and Phillis JW. (poster presentation- Congress of Neurological Surgeons 2002) Differential effects of phospholipase inhibitors on free fatty acid efflux in rat cerebral cortex during ischemia-reperfusion injury.
8. **Pilitsis JG**, Coplin WM, O'Regan MH, Wellwood JM, Diaz FG, Fairfax MR, Michael DB, and Phillis JW. (oral presentation at the Michigan Association of Neurological Surgeons- 2002)The effects of stroke and other cerebral insults on free fatty acid release.
9. **Pilitsis JG** and Brown JB. (Michigan Association of Neurological Surgeons – oral presentation June 2002). Motor cortex stimulation in the treatment of central and neuropathic facial pain.
10. **Pilitsis JG** and Brown JB. (Neurosurgical Society of America- oral presentation April 2002). Motor cortex stimulation in the treatment of central and neuropathic facial pain.

11. **Pilitsis JG**, Phillis JW, Wellwood JM, O'Regan MH, Diaz FG, Michael DB, Fairfax MR, and Coplin WM. (poster presentation at American Association of Neurological Surgeons -2002) CSF Free Fatty Acid concentrations and outcome after ischemic and hemorrhagic stroke.
12. **Pilitsis JG**, Coplin WM, Wellwood JM, O'Regan MH, Diaz FG, Michael DB, Fairfax MR, and Phillis JW. (oral presentation at Congress of Neurological Surgeons -2003) CSF Free Fatty Acid concentrations and outcome after traumatic brain injury.
13. **Pilitsis JG**, Coplin WM, Wellwood JM, O'Regan MH, Diaz FG, Michael DB, Fairfax MR, and Phillis JW. (oral presentation at Society for Neuroscience -2003) CSF Free Fatty Acid concentrations and outcome after traumatic brain injury.
14. **Pilitsis JG**, Coplin WM, Wellwood JM, O'Regan MH, Diaz FG, Michael DB, Fairfax MR, and Phillis JW. (oral presentation at National Neurotrauma Society -2003) CSF Free Fatty Acid concentrations and outcome after traumatic brain injury.
15. **Pilitsis JG** and Brown JA. (oral presentation at the Michigan Association of Neurological Surgeons- 2003). Motor cortex stimulation for neuropathic facial pain: results of multidimensional pain scale evaluation and observations of sensory and motor improvement during stimulation.
16. **Pilitsis JG** and Brown JA. (oral presentation - American Association of Neurological Surgeons April 2003) Motor cortex stimulation for neuropathic facial pain: results of multidimensional pain scale evaluation and observations of sensory and motor improvement during stimulation.
17. **Pilitsis JG**. (oral presentation - American Association of Neurological Surgeons April 2003) Alfred Reginald Allen: A Pioneer in Spinal Cord Injury.
18. **Pilitsis JG**, Rezai AR, Henderson JM, Boulis NM, Busch RM, Kubu CS. (Oral presentation- ASSFN 2004) Variables affecting the development of transitional confusional states following bilateral STN stimulation in Parkinson's disease.
19. Brown JA, **Pilitsis JG**. (oral presentation- CNS 2005) Percutaneous balloon compression for trigeminal neuralgia.
20. **Pilitsis JG**, Rezai AR, Henderson JM, Boulis NM, Busch RM, Kubu CS. (Poster presentation- AANS 2005) Post-operative confusion following STN DBS predicts greater neuropsychological difficulties in the longterm: Preliminary Findings.
21. Gilmer-Hill H, **Pilitsis JG**, Kowaleski JL, Rozzelle A, Canady AI. (Oral presentation- AANS 2005) Management of Deformational Plagiocephaly: A Randomized, Prospective Analysis.
22. Sani S, **Pilitsis JG**, Bakay RAE. (poster presentation- CNS 2005) Technical complications of deep brain stimulation.
23. **Pilitsis JG**, Verhagen LM, Sani SB, Hughes LE, Toleikis JR, Bakay RAE. Factors associated with stimulation failure in essential tremor patients with Vim DBS. (Poster presentation- CNS-2006).

24. **Pilitsis JG**, Verhagen LM, Toleikis JR, Bakay RAE. Evaluation of the accuracy of intraoperative xray in bilateral STN DBS surgeries. (Poster presentation AANS 2007).
25. Burrows A, Moser R, Weaver J, Litwin D, **Pilitsis JG**. The effect of the role out of Massachusetts health care reform on neurosurgical procedure reimbursements. (oral presentation- CNS 2008)
26. Peters, ML, Ravin PD, Novak P, Swearer J, King J, **Pilitsis JG**, A Case Control Study of Olfaction and Parkinson's Disease. Selected abstract/oral presentation American Medical Student Association 2008.
27. Peters, ML, Ravin PD, Novak P, Swearer J, King J, Dundamadappa SK, **Pilitsis JG**, DBS-implanted Parkinson's Disease Patients Show Better Olfaction Than Those Treated Medically, (Oral presentation AANS 2009)
28. Burrows AM, Ravin PD, Novak P, Dessureau B, Swearer J, **Pilitsis JG**, Limbic and Motor Function Comparison of Deep Brain Stimulation of the Zona Incerta and Subthalamic Nucleus. (Oral presentation AANS 2009)
29. Deck G, Carroll J, Tseng J, **Pilitsis JG**, The effect of age and co-morbidities on outcome following subdural hematoma evacuation (Oral presentation AANS 2010).
30. Kleinman J, Peters ML, Huang W, Ravin P, Novak P, King J, Boursily A, **Pilitsis JG**. Assessment of olfactory processing in Parkinson's Disease (oral presentation ASSFN 2010).
31. Kleinman J, Novak P, Ravin P, **Pilitsis JG**. Electrophysiological assessment of DBS battery malfunction (poster presentation ASSFN 2010).
32. Przybyszewski AW , **Pilitsis JG**, Margolin L , Barborica A; Ravin P, Novak P. Multi-parametric analysis assists in STN localization in Parkinson patients (Society for Neuroscience 2010).
33. **Pilitsis JG**, Przybyszewski WA, Margolin L, Barborica A Ravin P, Novak P. Multi-parametric analysis assists in STN localization in Parkinson patients. American Association of Neurological Surgeons Denver, Colorado April 2011, poster presentation.
34. Verhagen Metman, L, Toleikis JR, **Pilitsis JG**, Toleikis SC, Barborica A, Bakay RAE. Human STN Single Unit Activity Acquired during Deep Brain Stimulation. American Academy of Neurology Honolulu, Hawaii April 2011
35. **Pilitsis JG**, Beverly SA, Mazzola CM, Colen C, Ashley W, Steinmetz M. Medical Student Education in Neurosurgery. Congress of Neurological Surgeons Washington DC October 2011, forum presentation.
36. **Pilitsis JG**, Peters ML, Sargent J, Tseng J, Ng SC, Burrows AM; Growth rates and patterns of deep brain stimulation. Congress of Neurological Surgeons. Washington DC, October 2011, forum presentation.

37. **Pilitsis JG**, Blais MC, Cruz C, Cocchirella A, Shaikh S, Hudlin M. A prospective study of a modified WHO checklist in the Neurosurgical Operating room. Congress of Neurological Surgeons. Washington DC, October 2011, poster presentation.
38. Shaikh S, Blais MC, Cruz C, Cocchirella A, Hudlin M, **Pilitsis JG**. A prospective study of a modified WHO checklist in the Neurosurgical Operating room. Society for Neuroscience in Anesthesiology and Critical Care, Chicago, October 2011 (abstract published- Journal of Neurosurgical Anesthesiology)
39. **Pilitsis JG**, Cole G, Fischer G. Stereotaxy with Real-time MRI-Guided Robot Assistance. American Association of Stereotactic and Functional Neurosurgery. Oral Presentation June 2012
40. Campbell, J.C., Sheeran, K., Shin, D.S., **Pilitsis, J.** (October 2012). Deep brain stimulation of the subthalamic nucleus in the parkinsonian rat increases gamma oscillatory activity in the orbitofrontal cortex. Program No. 651.16. 2012. Neuroscience Meeting Planner. New Orleans, LA: Society for Neuroscience, 2012. Online.
41. Winfree C, Arle J, Machado A, Patil P, **Pilitsis JG**, Schwalb J, Slavin K. Practical Course in Neurostimulation For Residents. American Association of Neurological Surgeons Annual Scientific Meeting. Faculty April 27th 2013
42. Okonkwo D, Timmons S, Hawryluk G, Jallo J, Le Roux P, Medow J, **Pilitsis JG**, Slotkin J. Head Trauma: Current Treatments And Controversies With Hands-On Practical Session in Brain Monitoring. American Association of Neurological Surgeons Annual Scientific Meeting. Faculty April 28th 2013.
43. Levine D, Durphy J, Novak P, Molho E, Ramirez-Zamora A, **Pilitsis JG**. Accuracy in Staged Bilateral Deep Brain Stimulation Surgery. American Association of Neurological Surgeons Annual Scientific Meeting. Oral Presentation April 29th 2013.
44. Starr P, Goodman R, House P, Machado A, **Pilitsis JG**. Surgical Treatment of Parkinson's Disease. American Association of Neurological Surgeons Annual Scientific Meeting. Panelist April 30th 2013.
45. Smith T, Park A, Mithal D, Mogiler A, **Pilitsis JG**, Winfree C, Rosenow J. Survey of the Current State of Neurosurgical Chronic Pain Care And Education. AANS Annual Scientific Meeting. Oral Presentation April 30th 2013.
46. Ramirez-Zamora A, Molho E, **Pilitsis JG**. Globus pallidus interna deep brain stimulation for treatment of dystonic tremor. PSG Symposium Montreal Canada, October 1st, 2013.
47. de La Cruz P, Roth S, Campbell J, Heran Willock M, Pullano E.C., **Pilitsis JG**. Prospective Study on the Psychological Outcomes of Peripheral Nerve Stimulation for Cranial Pain. 30th annual Wilbert C. Jordan Research Forum. Poster Presentation
48. de La Cruz P, Roth S, Campbell J, Heran Willock M, Pullano E.C., **Pilitsis**

JG.Prospective Study on the effects of peripheral nerve stimulation on quality of life. April 2014 American Association of Neurological Surgeon Scientific Meeting. Poster Presentation

49. Roth S, **Pilitsis JG**, Haller J, Heran Wilock M, de La Cruz P, Spaniccioli, Gooch M.R. Analysis of Outcomes Following Neurophysiologically-Guided Spinal Cord Stimulation. 2014 AANS Annual Scientific Meeting. E-Poster Presentation
50. de La Cruz P, Roth S, Campbell J, Heran Wilock M, Pullano E.C., **Pilitsis JG.**Prospective Investigation of Peripheral Nerve Stimulation Functional Outcomes in Chronic Pain Patients. 2014 American Society for Stereotactic and Functional Neurosurgery Biennial Meeting. Poster Presentation
51. Roth S, Campbell J.C., Haller J, Heran M, de La Cruz P, Paniccioli S, Briotte M, Gooch M.R., **Pilitsis JG.** Prospective Study of Patient Outcomes Following Spinal Cord Stimulation with Intraoperative Monitoring. American Society for Stereotactic and Functional Neurosurgery (ASSFN) 2014 Biennial Meeting. Research Presentation and Moderator June 1, 2014
52. Fischer G.S., Burdette C, **Pilitsis JG.** Development of MRI-guided Robotic High-intensity Ultrasound Needle/Catheter for Ablation of Brain. 2014 Congress of Neurological Surgeons Annual Meeting, October 18 - 22 Boston, Massachusetts.PosterPresentation
53. Roth SG, Haller J, Heran M, Lange S, Campbell JC, De La Cruz P, **Pilitsis JG.** Do Advanced Programming Options Make a Difference in Spinal Cord Stimulation? 2014 Congress of Neurological Surgeons Annual Meeting, October 18-22 Boston, Massachusetts.oral Presentation
54. De La Cruz P, Roth G, Campbell JC, Haller J, Wilock M, Lange S, **Pilitsis JG.** Predictors of spinal cord stimulation success. 2014 Congress of Neurological Surgeons Annual Meeting, October 18–22 Boston, Massachusetts. Oral Presentation
55. **Pilitsis JG**, Zamora A.R., Eijkholt M. Shaking up the debate; Quality of life measures as ethical justifications for earlier DBS interventions in Parkinson's Disease. American Society for Bioethics and Humanities (ASBH) October 2014 Annual Meeting. ASBH Proposal Presentation
56. Gee L, Campbell J, Shin D, **Pilitsis JG.** An Investigation of the Effects of subthalamic Deep Brain Stimulation on Thermal and Mechanical Thresholds in Parkinsonian rats. Original Science Program at the 2014 Congress of Neurological Surgeons Annual Meeting, October 18–22 Boston, Massachusetts. Oral Presentation and CNS Digital Poster
57. Youn Y, Smith H, **Pilitsis JG** The Effect of High Frequency Stimulation on Sensory Thresholds in Chronic Pain Patients, North American Neuromodulation Society, Dec 11-14, 2014 Las Vegas, NV; Poster presentation.
58. Smith H, Youn Y, **Pilitsis JG** Successful use of high-frequency spinal cord stimulation following traditional treatment failure. North American Neuromodulation Society, Dec 11-14, 2014 Las Vegas, NV; Poster presentation.

59. Smith H, Gee L, Youn Y, **Pilitsis JG** The effect of subthalamic nucleus deep brain stimulation on impulsivity. North American Neuromodulation Society, Dec 11-14, 2014 Las Vegas, NV; Oral presentation
60. Youn Y, Smith H, Morris B, Argoff C, **Pilitsis JG**. The Effect of High Frequency Stimulation on Sensory Thresholds in Chronic Pain patients. Centennial American Medical Women's Association Meeting, April 24-26, 2015 Chicago, Illinois. Poster Presentation.
61. Roth SG, Haller J, Heran M, Lange S, Campbell JC, De La Cruz P, **Pilitsis JG**. Intraoperative monitoring allows for lateralization of Spinal Cord Stimulators. May 2015, AANS, Washington DC, Oral Presentation
62. **Pilitsis JG** et al. Low Back Pain Relief and Patient-Specific Programming Optimization with a new 32-Contact Spinal Cord Stimulation (SCS) Surgical Lead May 2015, AANS, Washington DC, Oral Presentation
63. Kumar V, Wilock M, Youn Y, **Pilitsis JG**. Alterations in Stimulation Parameters in Response to Changes in Body Position, International Neuromodulation Society, June 2015, Montreal CA Poster presentation
64. Gee L, Shin D, **Pilitsis JG**. Thalamic relay and interneurons may play a role in altered mechanical thresholds following subthalamic deep brain stimulation (STN DBS) in 6 hydroxydopamine lesioned rodents International Neuromodulation Society, June 2015, Montreal CA Poster presentation
65. Youn Y, Kumar V, Smith H, Wilock M, Argoff A; **Pilitsis JG**. High Frequency Stimulation Decreases Thermal Thresholds in Patients with Neuritis. International Neuromodulation Society 12th World Congress, June 6-8, 2015 Montreal, Quebec, Canada. Poster Presentation.
66. Ramimeni T, Kumar V, DeLaCruz P, **Pilitsis JG**. A prospective assessment of the impact of spinal cord stimulation on sleep quality International Neuromodulation Society 12th World Congress, June 6-8, 2015 Montreal, Quebec, Canada. Poster Presentation.
67. Golebiowski D, Petrosky K, Van der Marel K, Hutto E, Curran E, Balkanska-Sinclair E, Bishop N, Santos R, Macr SCi, Marti Dn, Gounis M, **Pilitsis JG**, Asaad W, Sena-Esteves M. Optimization of AAV vector design for safe expression of β -N-acetylhexosaminidase in the brain for Tay-Sachs disease gene therapy. ASGCT, May 2015, oral presentation
68. Paul AR, Kumar V, Roth SG, Gooch MR, **PilitsisJG**. Determining the Minimally Clinical Important Difference in Pain, Quality of Life, and Disability for Spinal Cord Stimulation for Failed Neck and Failed Back Syndromes. Neurosurgery. 2015 Aug;62 Suppl 1:205-6.
69. Walling I, Gee L, Neubauer P, Firth L, Williams E, Burdette C, **Pilitsis JG**. Pulse modulation of the occipital nerve using focused high intensity ultrasound improves mechanical thresholds in a chronic migraine rat model. National Center for Image

Guided Therapy in Bethesda, Maryland, 3/15/16 Poster presentation.

70. Gee L, Burdette C, Ghoshal G, Kumar V, Walling I, Prusik J, Shin D, **Pilitsis JG**. Interstitial directional high intensity focused ultrasound in a 6-hydroxydopamine lesioned rodent model of Parkinson's Disease. 84th AANS Annual Scientific Meeting, April 30-May 4th, 2016 Chicago, IL. Oral Presentation.
71. Belasen A, Youn Y, Prusik J, Lai B, Ramirez-Zamora A, Gee L, Rizvi K, Yeung P, Shin D, Argoff C, **Pilitsis JG**. The effect of mechanical and thermal stimuli on local field potentials and single unit activity in Parkinson's disease. 84th AANS Annual Scientific Meeting, April 30-May 4th, 2016 Chicago, IL. Oral Presentation.
72. Marola O, Prusik J, Fama C, Kumar V, Cherala R, Wilock M, Crimmins J, **Pilitsis JG**. BMI as a predictor of spinal cord stimulation success in chronic pain patients. 84th AANS Annual Scientific Meeting, April 30-May 4th, 2016 Chicago, IL. Poster Presentation.
73. Owusu-Sarpong S, Haider S, Peris-Celda M, Wilock M, Prusik J, Youn Y, **Pilitsis JG**. Cervical Spinal Cord Stimulation: Outcomes with Percutaneous and Paddle Leads. 84th AANS Annual Scientific Meeting, April 30-May 4th, 2016 Chicago, IL. Oral Presentation.
74. **Pilitsis JG**, Barolat G, Brill N, Lechleite K, Moffitt M. Characterization of Paresthesia Distributions with Transverse Current Steering in Spinal Cord Stimulation using a 4-column Surgical Lead. 2016 Congress of Neurological Surgeons (CNS) Annual Meeting. September 24-28th, 2016. San Diego, CA. Digital Poster Presentation.
75. Walling I, Gee L, Neubauer P, Frith L, Williams E, Burdette C, **Pilitsis JG**. Pulse Modulation of the Occipital Nerve Using Focused High-intensity Ultrasound Improves Mechanical Thresholds in a Chronic Migraine Rat Model. 2016 Congress of Neurological Surgeons (CNS) Annual Meeting. September 24-28th, 2016. San Diego, CA. Oral Presentation.
76. Youn Y, Walling I, Gee L, Neubauer P, Frith L, Williams E, Burdette C, **Pilitsis JG**. High Intensity Ultrasound for the Treatment of Vincristine Induced Neuropathic Pain. 2016 Congress of Neurological Surgeons (CNS) Annual Meeting. September 24-28th, 2016. San Diego, CA. Oral Presentation.
77. **Pilitsis J**. Advances in Neuromodulation. The Art and Science of Pain: A Clinical and Research Update. October 15, 2016. Saratoga Springs, NY. Oral Presentation.
78. **Pilitsis J**, Barolat G, Brill N, Lechleite K, Moffitt M. Transverse Current Steering in SCS using a 4-column Lead: Clinical Validation of Computational Modeling Data. North American Neuromodulation Society (NANS) Annual Meeting. January 19-22, 2017. Las Vegas, Nevada. Poster Presentation.
79. Prusik J, Prabhala T, Cherala R, Gruenthal E, Owusu S, Collison C, Wilock M, Hobson E, McCallum S, **Pilitsis JG**. Use of a Psychological Evaluation Tool as a Predictor of Spinal Cord Stimulation Outcomes. North American Neuromodulation Society (NANS) Annual Meeting. January 19-22, 2017. Las Vegas, Nevada. Poster Presentation.

80. Gruenthal E, Owusu S, Prusik J, Cherala R, Peng S, Feustel P, **Pilitsis, JG**. Prospective Evaluation of Patient Usage Patterns with Subparesthesia Waveforms. North American Neuromodulation Society (NANS) Annual Meeting. January 19-22, 2017. Las Vegas, Nevada. Poster Presentation.
81. Kumar V, Prusik J, Argoff A, **Pilitsis JG**. Therapeutic Efficacy of Alternating High Frequency Stimulation with Tonic Stimulation in the Treatment of Chronic Pain. North American Neuromodulation Society (NANS) Annual Meeting. January 19-22, 2017. Las Vegas, Nevada. Poster Presentation.
82. Walling I, Gee L, Kaszuba B, Kumar V, Gannon S, Hellman A, Neubauer, Frith L, Williams E, Ghoshal G, Shin D, Burdette C, **Pilitsis JG**. The use of high intensity focused ultrasound for the treatment of cutaneous allodynia associated with chronic migraine: pulse modulation vs nerve ablation. North American Neuromodulation Society (NANS) Annual Meeting. January 19-22, 2017. Las Vegas, Nevada. Poster Presentation.
83. Deuel L, **Pilitsis J**, Ramirez-Zamora A. Battery consumption and need for replacement in patients with Parkinson disease treated with interleaved deep brain stimulation. *Movement Disorders* 2017;32(Suppl 2):S145. International Congress of Parkinson's Disease and Movement Disorders. June 4-7, 2017. Vancouver, BC, Canada. Poster Presentation.
84. Khan H, **Pilitsis JG**, Prusik J, Smith H, McCallum SE. Pain remission at one year follow up with Spinal Cord Stimulation. North American Neuromodulation Society (NANS) 21st Annual Meeting. January 11-14, 2018. Las Vegas, Nevada. Poster Presentation.
85. Lin Y, **Pilitsis JG**, Feustel P, Sukul V, Prusik J, McCallum SE. Comparison of Active Cathode Locations in Patients with Tonic and Sub-Threshold Spinal Cord Stimulation. Neuromodulation Society (NANS) 21st Annual Meeting. January 11-14, 2018. Las Vegas, Nevada. Poster Presentation.
86. Gee L, Smith HC, Ghulam-Jelani Z, Khan H, Prusik J, Feustel PJ, McCallum SE, **Pilitsis JG**. Spinal cord stimulation for the treatment of chronic pain results in superior clinical outcomes when used without opioids. North American Neuromodulation Society (NANS) 21st Annual Meeting. January 11-14, 2018. Las Vegas, Nevada. Poster Presentation.
87. Lin Y, MacDonell, Prusik J, **Pilitsis JG**. BurstDR™ Stimulation Improves Pain Experience in Patients After Inadequate Relief with Tonic Stimulation. North American Neuromodulation Society (NANS) 21st Annual Meeting. January 11-14, 2018. Las Vegas, Nevada. Poster Presentation.
88. MacDonell, Prusik J, Gillogly M, **Pilitsis JG**. Usage Patterns During Simultaneous Administration of Tonic and Subthreshold wavefronts: A Pilot Study. North American Neuromodulation Society (NANS) 21st Annual Meeting. January 11-14, 2018. Las Vegas, Nevada. Poster Presentation.
89. Hwang R, Ghulam-Jelani Z, Chockalingam A, Kumar V, McCallum SE, Su W,

Hobson E, Sukul V, **Pilitsis JG**. The safety of deep brains stimulator lead placement in patients routinely on anticlotting drugs. North American Neuromodulation Society (NANS) 21st Annual Meeting. January 11-14, 2018. Las Vegas, Nevada. Poster Presentation.

90. Kumar V, Prusik J, Lin Y, Hwang R, Feustel P, **Pilitsis JG**. Efficacy of Alternating Conventional Stimulation and High Frequency Stimulation in Improving Spinal Cord Stimulation Outcomes: A Pilot Study. North American Neuromodulation Society (NANS) 21st Annual Meeting. January 11-14, 2018. Las Vegas, Nevada. Poster Presentation.
91. DiMarzio M, Gillogly M, Hancu I, Fiveland E, Rashid T, Joel S, Madhavan R, Prusik J, Molho E, Durphy J, Hanspal E, **Pilitsis JG**. Use of functional MRI to understand modulation of chronic pain in Parkinson Disease patients with DBS. 2018 AANS Annual Scientific Meeting in New Orleans, LA on April 28-May 2, 2018. E-poster.
92. Kaszuba B, Walling I, Feustel P, Stapleton A, Shin D, **Pilitsis JG**. "Neurosurgery Research Principles and Dynamics: Effects of Subthalamic Deep Brain Stimulation with Gabapentin and Morphine on Mechanical and Thermal Thresholds in 6-Hydroxydopamine Lesioned Rats". 2018 AANS Annual Scientific Meeting in New Orleans, LA on April 28-May 2, 2018. Oral Presentation.
93. Prabhala T, Hellman A, Walling I, Maietta T, Qian J, Clif Burdette C, Frith L, Shao M, Stapleton A, Thibodeau J, **Pilitsis JG**. High Intensity Focused Ultrasound Treatment for Neuropathic Pain Induced by Common Peroneal Nerve Injury. 2018 AANS Annual Scientific Meeting in New Orleans, LA on April 28-May 2, 2018. Oral Presentation.
94. Shao M, Maietta T, Walling I, Kaszuba B, Prabhala T, Stapleton A, Kim N, Shin DS, **Pilitsis JG**. "Subthalamic Nucleus Deep Brain Stimulation Combined with Duloxetine Changes Pain Behavior in Parkinsonian Rats." 2018 AANS Annual Scientific Meeting in New Orleans, LA on April 28-May 2, 2018. Oral Presentation.
95. Gee L, Smith HC, Ghulam-Jelani, Z, Khan H, Prusik J, Feustel PJ, McCallum SE, **Pilitsis, JG**. Spinal cord stimulation for the treatment of chronic pain reduces opioid use and results in superior clinical outcomes when used without opioids. 2018 AANS Annual Scientific Meeting in New Orleans, LA on April 28-May 2, 2018. Oral Presentation.
96. Shao MM, Maietta T, Walling I, Kaszuba B, Prabhala T, Stapleton A, Kim N, Shin DS, **Pilitsis JG**. Subthalamic Nucleus Deep Brain Stimulation Combined with Duloxetine Changes Pain Behavior in Parkinsonian Rats. American Society for Stereotactic and Functional Neurosurgery 2018 Biennial Meeting. Denver, CO. June 2-5, 2018. Oral Presentation
97. Gillogly M, Prusik J, Kumar V, MacDonell, Hwang R, **Pilitsis J**. A Pilot study of usage patterns during simultaneous administration of tonic and subthreshold waveforms. American Society for Stereotactic and Functional Neurosurgery 2018 Biennial Meeting. Denver, CO. June 2-5, 2018. Oral Presentation.
98. Telkes I, Paniccioli S, Grey R, Briotte M, McCarty K, **Pilitsis JG**. Effect of Spinal

Cord Stimulation on Intraoperatively Recorded EEG in Chronic Pain Patients.
Accepted for presentation at the 2018 NYC Neuromodulation NANS Summer Series Meeting in New York, NY on August 23-26, 2018. Oral Presentation.

99. Telkes I, Hwang R, Durphy J, Adam O, **Pilitsis JG**. Directional Local Field Potentials Recorded from Ventral Capsule/Ventral Striatum in Obsessive-Compulsive Disorder. Accepted for presentation at the 2018 NYC Neuromodulation NANS Summer Series Meeting in New York, NY on August 23-26, 2018. Oral Presentation.

INVITED LECTURES

Institutional:

1. Emerging Applications of Deep Brain Stimulation. Dept of Neurology Grand Rounds; Sept 11, 2007
2. Invited Lecturer to Psychiatry Residents Deep Brain Stimulation for Depression; Dec 20, 2007
3. Parkinson's Disease- The Role of Deep Brain Stimulation; Institutional Combined Grand Rounds; January 25, 2008
4. The Science behind Deep Brain Stimulation; Frontiers in Science Program for K-12 Teachers; March 11, 2008
5. Invited Speaker – MD/PhD Annual Retreat; University of Massachusetts Medical School; March 13, 2008
6. Parkinson's Disease-The Role of Deep Brain Stimulation; University of Massachusetts Primary Care Day. March 13, 2008.
7. Deep Brain Stimulation: What Providers need to know.
 - a. Lecture to Neurosurgical Midlevels; Sept 11, 2007
 - b. Lecture to OR staff January 9, 2007
 - c. Lecture to ICU Midlevels: March 25, 2008
8. DBS for psychiatric indications- Dept of Neuropsychiatry; February 4, 2010
9. Olfaction as a biomarker in Parkinson's; Department of Psychiatry July 15, 2010
10. Neurosurgery for midlevels University of Massachusetts August 5, 2010
11. Olfaction as a biomarker in Parkinson's; GSBS University of Massachusetts September 2, 2010
12. Psychosurgery: Past, present and future; Department of Psychiatry Grand Rounds September 23, 2010
13. Deep Brain Stimulation; Frontiers in Science Program for K-12 Teachers; March 15, 2011
14. DBS for OCD- Dept of Neuropsychiatry; University of Massachusetts; March 2011
15. Restorative Neurosurgery: Neurosurgery CME event for PCPs, Albany Medical Center, September 12, 2012
16. Deep Brain Stimulation Grand Rounds Department of Anesthesia, November 2012
17. Stimulation: Neurosurgery CME event for PCPs, Albany Medical Center, October 2013
18. What's new in neuromodulation? Grand Rounds Department of Neurology, February 2014
19. Whose Pain is it anyway?: Neurosurgery CME event for PCPs, Albany Medical Center, October 2014
20. Establishing a Paradigm for Translational Research at AMC. Grand Rounds for Department of Psychiatry, Albany Medical Center, October 12, 2016

21. Advances in Pain Neuromodulation. Grand Rounds for Department of Medicine, Albany Medical Center, October 27, 2016
22. What's New in Neuromodulation in Pain. Grand Rounds for Department of Neurosciences, Albany Medical Center, March 23, 2017
23. Psychosurgery: Past, Present and Future. Grand Rounds for Department of Psychiatry, Albany Medical Center, November 1, 2017.

Regional:

1. Parkinson's Disease: Information for patients about surgical options; Springfield, MA October 20, 2007
2. Low Back Pain: The role of surgery; Harrington Memorial Hospital, Southbridge, MA December 6, 2007
3. Low Back Pain: The role of surgery; Marlborough Hospital, Marlborough, MA December 7, 2007
4. Parkinson's Disease- The Role of Deep Brain Stimulation Holyoke Medical Center; Holyoke, MA January 8, 2008
5. The role of surgery in the treatment of psychiatric disorders. Presentation to MA Health Directors on Psychiatric Disease February 7, 2008
6. Parkinson's Disease: Information for patients about surgical options; Heywood Hospital PD Support Group; Gardner, MA February 27, 2008
7. Parkinson's Disease- The Role of Deep Brain Stimulation; Neurology Grand Rounds; St. Vincent's Hospital; Worcester, MA February 28, 2008
8. Parkinson's Disease- The Role of Deep Brain Stimulation; Grand Rounds; HealthAlliance Hospital; Leominster, MA May 20, 2008
9. Parkinson's Disease- The Role of Deep Brain Stimulation; Grand Rounds; Marlborough Hospital, Marlborough, MA May 20, 2008
10. Parkinson's Disease: Information for patients about surgical options; Springfield PD Support Group; Springfield, MA October 7, 2008
11. Frontiers in PD; UMass PD Support Group; Worcester, MA October 8, 2008
12. Frameless DBS for PD; APDA Annual Educational Event; Sturbridge, MA November 14, 2008
13. Spinal Cord Stimulation for Pain- Grand Rounds; Leominster Hospital, Leominster MA December 8, 2009
14. Deep Brain Stimulation- VNA of Worcester- December 9, 2009
15. Presenter- Deep Brain Stimulation Hanover Wellness Fair- April 14, 2010 Worcester MA
16. Spinal Cord Stimulation for Pain- Grand Rounds; Harrington Hospital, April 15, 2010
17. Blood in the Brain- Grand Round; Wing Hospital Palmer, MA May 21, 2010
18. Functional neurosurgery- where we are and where we are going Albany Medical College January 2012
19. Deep Brain Stimulation- Attleboro Support Group- April 13, 2011
20. Deep Brain Stimulation- Saratoga Support Group- January 12, 2012
21. Neurostimulation for pain- Kingston Hospital- May 10, 2012
22. Deep brain stimulation- what to expect; Parkinson's Education Event May 19, 2012
23. Deep brain stimulation- what to expect; Essential Tremor Education Event September 19, 2012
24. Women in Medicine: Perspectives of the Female Physician. April 9, 2013
25. Deep brain stimulation- what's new; Parkinson's Education Event May, 2013

26. Lunch and Learns- Deep brain stimulation- Fall 2013- multiple events
27. Management of low back pain; Parkinson's Education Event April 2014
28. Translational Pain and Neuromodulation. The New York State Pain Society, Annual Meeting. West Harrison, New York. April 1, 2017
29. Deep Brain Stimulation for Parkinson's Disease. The Healthcare Seminar Series for GE. Niskayuna, NY. August 30, 2017

National:

1. Spinal Cord Stimulation- AANS/CNS Section on Pain Biennial Symposium; April 25, 2008; Chicago, IL
2. Deep Brain Stimulation for Movement Disorders- 2008 Annual Clinical Assembly of Osteopathic Specialists; Sept 14, 2008, Boca Raton, FL
3. Deep Brain Stimulation for Pain - 2008 Annual Clinical Assembly of Osteopathic Specialists; Sept 14, 2008, Boca Raton, FL
4. Integrated Medical Learning Moderator- AANS/CNS Section on Pain; Organizer of Session; Congress of Neurological Surgeons; Sept 23, 2008, Orlando, FL
5. Spinal Cord Stimulation for Failed Back Surgery Syndrome; Congress of Neurological Surgeons Sept 23, 2008, Orlando, FL
6. Neuromodulation for Residents- American Association of Neurological Surgeons; May 5, 2009; San Diego, CA
7. Review of the 2009 Pain Literature- Congress of Neurological Surgeons – October 2009; New Orleans LA
8. Intrathecal Pumps and Complications; AANS/CNS Pain Section Biennial Event April 30, 2010; Philadelphia, PA
9. Moderator- Scientific Session- AANS Philadelphia, PA May 3, 2010
10. Neuromodulation for Residents- American Association of Neurological Surgeons; May 2010; Philadelphia PA
11. Moderator- Scientific Session- Coding for Pain Procedures; CNS; October 2010 San Francisco, CA
12. Coding of Intrathecal Pumps- CNS October 2010; San Francisco CA
13. Neuromodulation for Residents- American Association of Neurological Surgeons; April 2011 Denver, CO
14. Geriatric Brain Injury American Association of Neurological Surgeons; April 2011 Denver, CO
15. Medical Student Education Council of State Neurosurgical Societies April 2011 Denver CO
16. DBS for pain; American Academy of Pain Management; Las Vegas NV September 2011
17. Course Director- Integrating Pain into your practice CNS Washington DC October 2011;
18. Moderator- Complications of pain surgery; CNS; Washington DC October 2011
19. Moderator- General Plenary Session; CNS; Washington, DC; October 2011
20. What to expect from your Surgery: APDA/NPF young onset annual conference; Providence RI; October 2011.
21. Spinal Cord Stimulation for Neuromodulation for Residents- American Association of Neurological Surgeons; April 2012 Miami, FL
22. Geriatric Brain Injury American Association of Neurological Surgeons; April 2012 Miami FL
23. The role of microelectrode recording- Surgical Management of Parkinson's Disease

- American Association of Neurological Surgeons; April 2012 Miami FL
24. Course Director- Integrating Pain into your practice CNS Washington DC October 2012;
 25. Spinal Cord Stimulation for Neuromodulation for Residents- American Association of Neurological Surgeons; April 2013 New Orleans, LA
 26. Geriatric Brain Injury American Association of Neurological Surgeons; April 2013 New Orleans, LA
 27. Complication Avoidance- Surgical Management of Parkinson's Disease American Association of Neurological Surgeons; April 2013 New Orleans, LA
 28. Participant- Webinar- Functional Board Review- CNS- May 2013
 29. Moderator- Neuromodulation Update- CNS San Francisco, October 19, 2013
 30. Spinal Cord Stimulation: Patient Selection- CNS San Francisco, October 20, 2013
 31. Pathophysiology of pain through spinal mechanisms- CNS San Francisco Oct 23, 2013
 32. Blue Water Strategies for practice development- AANS/CNS Section on Pain; San Francisco; April 2014
 33. Intrathecal Pumps- AANS/CNS Section on Pain, San Francisco AANS, April 2014
 34. Anticoagulants and head injury- AANS Practical Course, April 2014
 35. Surgical Management of Parkinson Disease: Patient Selection; San Francisco, April 2014
 36. Moderator and Participant- Webinar- Functional Board Review- CNS- May 2014
 37. SCS- Awake or Asleep; Invited Lecture; ASSFN Washington, DC June 1, 2014
 38. Moderator- Scientific Section- ASSFN Washington, DC June 1, 2014
 39. Moderator, Participant CNS Board Review Chicago Aug 8, 2014
 40. Starting from Scratch, Practical Course CNS, Boston MA October 2014
 41. Troubleshooting and Salvage, Practical Course CNS, Boston MA, October 2014
 42. Mentorship, Section on Women in Neurosurgery, CNS, Boston MA, October 2014
 43. Moderator- Deep brain stimulation- North American Neuromodulation Society, Las Vegas, December 2014
 44. Patient Selection for Cancer pain intervention- North American Neuromodulation Society, Las Vegas, December 2014
 45. Blue Water Strategies for practice development- AANS/CNS Section on Pain; AANS, Washington DC; May 2015
 46. Anticoagulants and head injury- AANS Practical Course, May 2015; Washington DC
 47. Course Director, AANS Practical Course; Integrating Spine into your pain practice, AANS, Washington DC, May 2015
 48. Mentorship for Medical Students, AANS, Section on Women in Neurosurgery, AANS, April 2015, Washington DC.
 49. Introduction of Osler Lecturer AANS, Washington DC, May 2015
 50. Commentary- Petraglia et al: Delays from Pain Diagnosis to SCS Treatment Result in Higher Health-care Use Post-implantation AANS, Washington DC, May 2015
 51. Advances in Pain Neuromodulation. West Virginia University Visiting Professor Series; October 18, 2016
 52. What's new in neuromodulation for pain. 2017 Richard Lende Meeting Neurosurgery Conference. Snowbird, Utah. February 3, 2017
 53. Reimbursement Economics, billing for procedures, financial aspects of starting a practice, network development. American Association of Neurological Surgeons: The AANS/CNS Joint Section on Pain. Chicago, IL. May 20, 2017.
 54. A Translational Approach to Neuromodulation. Department of Neurosurgery; Vanderbilt University, Nashville, TN. September 20, 2017
 55. Moderator – Surgical Management of Pain and Hemifacial Spasm. 2017 CNS Annual

- Meeting. Boston, MA. October 8, 2017.
56. Moderator – Parkinson’s and Other Movement Disorders. Neurotech Investing and Partnering Conference. Boston, MA. May 2, 2018
 57. Surgery for Chronic Pain and Movement Disorders: Building a Practice and Coding. American Society for Stereotactic and Functional Neurosurgery 2018 Biennial Meeting. Denver, CO. June 2, 2018
 58. Moderator – Parallel Session on Pain. American Society for Stereotactic and Functional Neurosurgery 2018 Biennial Meeting. Denver, CO. June 5, 2018
 59. Diversity in Neurosurgery: Patients and Providers. Neurosurgery Grand Rounds at the Second Annual Carole A. Miller, MD Lectureship and Resident Research Day, The Ohio State University, Columbus, Ohio. July 5, 2018.

International:

1. Deep Brain Stimulation for Chronic Pain; International Neuromodulation Society, Montreal, CA June 2015
2. Deep Brain Stimulation for Obesity; International Neuromodulation Society, Montreal, CA June 2015
3. Neuromodulation for Eating Disorders: Potential Targets and Rationale. International Neuromodulation Society 13th World Congress. Edinburgh, Scotland. May 27-June June, 2017.
4. Psychological evaluations to predict spinal cord stimulation success. 2018 Neuromodulation Society of Australia and New Zealand; 13th Annual Scientific Meeting in Sydney, Australia. April 6-8, 2018.
5. Intracranial Neuromodulation – Fact or fantasy? 2018 Neuromodulation Society of Australia and New Zealand; 13th Annual Scientific Meeting in Sydney, Australia. April 6-8, 2018.
6. Spinal Cord Stimulator Implantation in Asleep Patients: Intraoperative Neuromonitoring. 2018 Neuromodulation Society of Australia and New Zealand; 13th Annual Scientific Meeting in Sydney, Australia. April 6-8, 2018.