

Date: August 22, 2014

Casey Harrison Halpern

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Education:

9/2003 – 6/2007	MD	University of Pennsylvania, School of Medicine
9/1999 – 6/2003	BA	University of Pennsylvania (Classical Studies)

Postgraduate Training and Fellowship Appointments:

7/2013 – 7/2014	Chief Resident, Neurosurgery
1/2013 – 6/24/2013	Fellow in Stereotactic and Functional Surgery, University of Pennsylvania, Philadelphia Medtronic Neuromodulation
1/2011 – present	Postdoctorate Research Fellow Laboratory of Tracy Bale, PhD University of Pennsylvania
7/2008 – present	Resident in Neurosurgery, University of Pennsylvania
6/2007 – 6/2008	Intern in Surgery, University of Pennsylvania, Philadelphia

Hospital and Administrative Appointments:

9/2011 – present	Interviewer, Admissions Committee, Perelman School of Medicine, University of Pennsylvania
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Special Certifications:

2014	ACLS
2009	Advanced Trauma Life Support
2004	Healthcare Interpreter (Spanish)

Awards, Honors and Membership in Honorary Societies:

2012	National Institutes of Health Clinical Loan Repayment (NINDS)
2012	Basic Science Award, American Society for Stereotactic and Functional Neurosurgery
2012	Second Place for “Best Clinical Oral Abstract” Pennsylvania Neurosurgical Society Annual Meeting
2012	Endocrine Society abstract selected for 2012 Research Summaries Book
2011	Society for Neuroscience presentation accepted as <i>Neuroscience</i> “Hot Topic”
2011	“Best Clinical Oral Abstract” Pennsylvania Neurosurgical Society Annual Meeting
2009	Young Alumni Award, Episcopal Academy
2005	Robert M. Toll Prize, best paper in the field of mental health
2005	College of Physicians of Philadelphia Edward Krumbhaar Award, Best medical essay by a medical student (honorable mention)
2004	History of Medicine Prize, University of Pennsylvania
2003	<i>Magna Cum Laude</i> , University of Pennsylvania
2001	<i>Advanced Standing</i> on Spanish Oral Proficiency Interview
2001	Dean’s List

Memberships in Professional and Scientific Societies:

National Societies:

	2012 – present	Young Neurosurgeon’s Committee
	2012 – present	American Society for Stereotactic and Functional Neurosurgery
	2009 – present	Congress of Neurological Surgeons
	2009 – present	American Association of Neurological Surgeons
Local Societies	2009 – present	Pennsylvania Neurosurgical Society
	2003 – 2006	Langfitt Society, Neurosurgery Interest Group (Coordinator)
	2003 – 2004	Penn Insight, mentoring program for Penn undergraduates
	2003 – 2007	Language Link, University of Pennsylvania
	2003 – 2007	University of Pennsylvania School of Medicine, Admissions and interviews
	2004 – present	Mask and Wig Graduate Club, Philadelphia PA
	1999 – 2003	Mask and Wig Club, Band, Philadelphia PA
	2000 – 2003	Delta Psi, St. Anthony Hall Fraternity (Historian 2000)
	2004 – 2007	Executive Committees of the Sections on Medical History and the Arts, College of Physicians of Philadelphia

### Research Support

- T32DA022605-05 Neurology NIH Training Grant (NIDA), January 2011-January 2012  
Title of investigation: Deep brain stimulation of the nucleus accumbens to suppress dietary preference and reinstatement
- Parkinson’s Disease Research, Education and Clinical Center (PADRECC) Grant Award, 2006  
Title of investigation: The Effect of Subthalamic Nucleus Deep Brain Stimulation on Neurotransmitter Release: Evidence from Microdialysis in Parkinsonian Patients
- Alpha Omega Alpha Student Research Fellowship, 2004  
Title of investigation: The neural basis for number knowledge: evidence from corticobasal degeneration

### Major Teaching Responsibilities for the University of Pennsylvania

1. Mentoring and supervision of 2 medical students and 3 undergraduate independent study researchers in laboratory of Tracy Bale, Ph.D.
2. Annual lecture for the Neuroanatomy course of the Penn Neuroscience Graduate Group, “Neuromodulation of the basal ganglia with deep brain stimulation”
3. Annual lectures for the Biological Basis of Behavior department of Penn’s College of Arts and Sciences, “Deep brain stimulation: a treatment for neurologic and psychiatric disease”

### Lectures by Invitation:

December 17, 2012	“Deep brain stimulation of the nucleus accumbens for obesity Evidence for efficacy and mechanism from mouse models” Center for Studies of Addiction, University of Pennsylvania
February 9, 2012	“Deep brain stimulation: a novel therapeutic approach for obesity” Grand Rounds, Department of Neurological Surgery Columbia University
January 26, 2011	“Understanding neural circuitry of reward: evidence from deep brain stimulation in a mouse model of binge eating disorder” Grand Rounds, Department of Neurosurgery University of Pennsylvania
December 16, 2011	“Binge eating behavior is suppressed by deep brain stimulation of the nucleus accumbens in mice” 22nd Annual Behavioral and Cognitive Neuroscience Retreat University of Pennsylvania

June 22, 2011	“Deep brain stimulation: Potential for neuromodulation in obesity” Center for Weight and Eating Disorders, University of Pennsylvania
October 4, 2011	“Deep brain stimulation: Potential for neuromodulation in drug addiction therapy” Center for Studies of Addiction, University of Pennsylvania
October 16, 2010	“Movement Disorders: From Adolescence to Adulthood” Annual Meeting of the Association of Neurosurgical Physician Assistants

#### Current Projects:

1. Binge eating is suppressed by deep brain stimulation of the nucleus accumbens in mice: a mechanistic approach
2. Optical neuromodulation of the nucleus accumbens using a wirelessly powered and controlled device alters binge-eating behavior
3. Sex differences in amelioration of binge eating with deep brain stimulation of the nucleus accumbens
4. Deep brain stimulation of the nucleus accumbens induces weight loss in a murine model of diet-induced obesity
5. Ventromedial prefrontal cortex deep brain stimulation rescues prepulse inhibition impairment in a mouse model of schizophrenia
6. Optically deconstructing dopaminergic circuitry underlying schizophrenia: evidence from deep brain stimulation in a mouse model of traumatic brain injury

#### Bibliography:

##### Original Papers:

1. **Halpern C**, McMillan C, Moore P, Dennis K, Grossman M. Calculation impairment in neurodegenerative diseases. *J Neurol Sci* 2003;208(1-2):31-8.
2. **Halpern CH**, Glosser G, Clark R, Gee J, Moore P, Dennis K, McMillan C, Colcher A, Grossman M. Dissociation of numbers and objects in corticobasal degeneration and Semantic dementia. *Neurology* 2004;62(7):1163-9.
3. **Halpern C**, Clark R, Moore P, Antani S, Colcher A, Grossman M. Verbal mediation of number knowledge: Evidence from semantic dementia and corticobasal degeneration. *Brain and Cognition* 2004;56(1):107-15.
4. **Halpern C**, Clark R, Moore P, Gee J, Grossman M. Too much to count on: Impaired very small numbers in corticobasal degeneration. *Brain and Cognition* 2007;64(2):144-9.
5. **Halpern CH**, Danish SF, Jaggi JL, Baltuch GH. Brain shift during deep brain stimulation surgery for Parkinson's disease. *Stereotactic and Functional Neurosurgery* 2008;86(1):37-43.
6. **Halpern CH**, Reilly PM, Turtz AR, Stein SC. Traumatic coagulopathy: the effect of brain injury. *J Neurotrauma*. 2008 Aug;25(8):997-1001.
7. Milby AH, **Halpern CH**, Guo W, Stein SC. Prevalence of cervical spinal injury in trauma. *Neurosurgical Focus*, 2008;25(5):E10.
8. Bauman J, **Halpern C**, Danish S, Zaghoul K, Church E, Jaggi J, Baltuch G. Subcutaneous heparin for prophylaxis of deep venous thrombosis in deep brain stimulation surgery: evidence from a decision analysis. *Neurosurgery*. 2009 Aug;65(2):276-80; discussion 280.
9. Nagpal S, **Halpern C**, Sims C, Gracias V, LeRoux P, Levine J. Decompressive laparotomy to treat intractable cerebral hypoxia. *Journal of Trauma* 2009;67(5):E152-5
10. **Halpern CH**, Milby AH, Guo W, Schuster JM, Gracias VC, Stein SC. Clearance of the cervical spine in clinically unevaluable patients. *Spine* 2010;35(18):1721-1728.
11. Kilpatrick M, Church E, Danish S, Stiefel M, Jaggi J, **Halpern C**, Kerr M, Maloney E, Robinson M, Lucki I, Krizman-Grenda E, Baltuch G. Intracerebral microdialysis during deep brain stimulation surgery. *J Neurosci Methods*. 2010;190(1):106-11.

12. Pisapia JM, **Halpern CH**, Williams NN, Wadden TA, Ph.D., Baltuch GH, Stein SC. Deep Brain Stimulation Compared to Bariatric Surgery for the Treatment of Morbid Obesity: a Decision Analysis Study. *Neurosurgical Focus*. 2010;29(2):E15.
13. Kramer DR, **Halpern CH**, Buonacuore D, McGill K, Hurtig HI, Jaggi JL, Baltuch GH. Best Surgical Practices: a Step-wise Approach to the University of Pennsylvania Deep Brain Stimulation Protocol. *Neurosurgical Focus*. 2010;29(2):E3.
14. **Halpern CH**, McGill K, Baltuch GH, Jaggi JL. Longevity analysis of currently available deep brain stimulation devices. *Stereotactic and Functional Neurosurgery*, 2011;89(1):1-5.
15. Mascitelli J, **Halpern CH**, Dolinskas CA, Zager EL, Welch WC. Carpal tunnel syndrome secondary to exostosis of the trapezium: case report. *J Clin Neurosci*. 2011 Nov;18(11):1558-9.
16. **Halpern CH**, Mitchell GW, Paul A, Kramer DR, McGill KR, Buonacuore D, Kerr M, Jaggi JL, Stern JJ, Baltuch GH. Self-administered, Pre-Operative Antiseptic Wash to Prevent Post-Operative Infection Following Deep Brain Stimulation. *Am J Infect Control*. 2012;40(5):431-3
17. Kramer DR, **Halpern CH**, Jaggi JL, Baltuch GH. The effect of intraventricular trajectory on brain shift in deep brain stimulation. *Stereotact Funct Neurosurg*. 2011 Dec 22;90(1):20-24.
18. Stephen JH, **Halpern CH**, Barrios CJ, Balmuri U, Pisapia JM, Wolf JA, Kampman KM, Baltuch GH, Caplan AL, Stein SC. Deep brain stimulation compared with methadone maintenance for the treatment of heroin dependence: a threshold and cost-effectiveness analyses. *Addiction*. 2012 Mar;107(3):624-34.
19. Tykocinski ES, Grant RA, Kapoor GS, Krejza J, Bohman LE, Gocke TA, Chawla S, **Halpern CH**, Lopinto J, Melhem ER, O'Rourke DM. Use of magnetic perfusion-weighted imaging to determine epidermal growth factor receptor variant III expression in glioblastoma. *Neuro Oncol*. 2012;14(5):613-23.
20. Connolly PJ, **Halpern CH**, Baltuch GH, Danish SF, Jaggi JL. Implications for programming strategy of the location of the active contact in subthalamic nucleus deep brain stimulation. *J Clin Neurosci*. 2012;19(7):1029-31
21. Kramer DR, **Halpern CH**, Connolly PJ, Jaggi JL, Baltuch GH. Error Reduction with Routine Checklist Use during Deep Brain Stimulation Surgery. *Stereotact Funct Neurosurg*. 2012;90(4):255-259
22. Attiah MA, **Halpern CH**, Balmuri U, Vinai P, Mehta S, Baltuch GH, Williams NN, Wadden TA, Stein SC. Durability of Roux-en-Y gastric bypass surgery: a meta-regression study. *Ann Surg*. 2012;256(2):251-4.
23. Srinivasan L, Pisapia JM, Shah SS, **Halpern CH**, Harris MC. Can broad-range 16S ribosomal ribonucleic acid gene polymerase chain reactions improve the diagnosis of bacterial meningitis? A Systematic Review and Meta-analysis. *Ann Emerg Med*, in press.
24. **Halpern CH**, Tekriwal A, Santollo J, Keating JG, Wolf JA, Daniels D, Bale TL. Amelioration of binge eating by nucleus accumbens shell deep brain stimulation in mice involves D2 receptor modulation. *J Neurosci*. 2013;33(17):7122-9.
25. **Halpern CH**, Lang S, Lee JYK. Fully Endoscopic Microvascular Decompression: Our Early Experience. *Minimally Invasive Surgery*, in press
26. **Halpern CH**, Attiah MA, Tekriwal A, Baltuch GH. Deep brain stimulation in mice: a step-by-step approach. *Acta Neurochir (Wien)*, in press.

#### Editorials, Reviews:

- Halpern C, Hurtig H, Jaggi J, Grossman M, Won M, Baltuch G. Deep brain stimulation in neurologic disorders. *Parkinsonism and Related Disorders* 2007;13:1–16.
- Halpern C, Hurtig H, Baltuch G. Deep brain stimulation for neurological diseases. *Encyclopedia of Life Sciences*, January 2007
- Halpern CH, Wolf JA, Bale TL, Stunkard AJ, Danish SF, Grossman M, Jaggi JL, Grady MS, Baltuch GH. Deep brain stimulation may play a role in treatment of obesity. *Journal of Neurosurgery* 2008 Oct;109(4):625-34.
- Stein SC, Halpern C, Reilly PM. Upsetting the balance. *Indian J Med Res* 2007;125:186-187.

- Halpern C, Samadani U, Litt B, Jaggi J and Baltuch G. Deep brain stimulation for epilepsy. *Neurotherapeutics*. 2008 Jan;5(1):59-67.
- Milby AH, Halpern CH and Baltuch GH. Vagus nerve stimulation for epilepsy and depression. *Neurotherapeutics*. 2008 Jan;5(1):75-85.
- Halpern C, Rick J, Danish S, Grossman M, Baltuch G. Halpern C, Rick J, Danish S, Grossman M, Baltuch G. Cognition following bilateral deep brain stimulation surgery of the subthalamic nucleus for Parkinson's disease. *Int J Geriatr Psychiatry*. 2009 May;24(5):443-51.
- Milby AH, Halpern CH, Baltuch GH. Vagus nerve stimulation in the treatment of refractory epilepsy. *Neurotherapeutics*. 2009 Apr;6(2):228-37.
- Halpern C, Samadani U, Litt B, Jaggi J and Baltuch G. Deep brain stimulation for epilepsy. Eds Krames, Elliot S., Peckham, P. Hunter & Rezai, Ali R. *Neuromodulation*. Academic Press, London, 2009.
- Lega BC, Halpern CH, Jaggi JL, Baltuch GH. Deep Brain Stimulation in the Treatment of Refractory Epilepsy: Update on Current Data and Future Directions. *Neurobiol Dis*. 2010 Jun;38(3):354-60.
- Milby AH, Halpern CH, Schuster JM. Coagulopathy in spine surgery. Eds Brambrink A, Kirsch JR. *Essentials of Neurosurgical Anesthesia & Critical Care: Strategies for Prevention, Early Detection, and Successful Management of Perioperative Complications*. Springer, New York, 2012.
- Halpern CH, Torres N, Hurtig HI, Wolf JA, Stephen J, Oh MY, Williams NN, Dichter MA, Jaggi JL, Caplan AL, Kampman KM, Wadden TA, Whiting DM, Baltuch GH. Expanding applications of deep brain stimulation: a potential therapeutic role in obesity and addiction management. *Acta Neurochir (Wien)*. 2011 Dec;153(12):2293-306.
- Halpern CH, Caplan AL, Wolf JA, Baltuch GH, Kampman KM, Stein SC. Cost-effectiveness analysis supports the initiation of a clinical trial of deep brain stimulation for heroin dependence. *Addiction*. 2012;107(7):1361
- Difrancesco MF, Halpern CH, Hurtig HH, Baltuch GH, Heuer GG. Pediatric indications for deep brain stimulation. *Childs Nerv Syst* 2012;10:1701-14.
- Müller UJ, Voges J, Steiner J, Galazky I, Heinze HJ, Möller M, Pisapia J, Halpern C, Caplan A, Bogerts B, Kuhn J. Deep brain stimulation of the nucleus accumbens for the treatment of Addiction. *Ann N Y Acad Sci*. 2013;1282:119-28.
- Grant RA, Halpern CH, Baltuch, GH, O'Reardon JP, Caplan A. Ethical Considerations in Deep Brain Stimulation for Psychiatric Illness: A Review. *J Clin Neuroscience*, 2014;21(1):1-5.
- Pisapa J, Halpern CH, Wadden TA, Baltuch GH, Caplan A. Ethical Considerations in Deep Brain Stimulation for the Treatment of Addiction and Obesity. *AJOB*, in press.

#### Chapters:

- Halpern C and Hurtig H. "Clinical outcome." *Deep Brain Stimulation for Parkinson's Disease-A Comprehensive Text*. Eds Baltuch GH, Stern MB. Philadelphia: Taylor and France Publishing, 2007, pages 187-198.
- Halpern C, Samadani U, Jaggi J and Baltuch G. *Neuromodulation: Deep Brain Stimulation. Operative Techniques in Epilepsy Surgery*. Eds Baltuch GH, Villemure J. New York: Thieme, 2009, pages 164-173.
- Halpern C, Samadani U, Litt B, Jaggi J and Baltuch G. Deep brain stimulation for epilepsy. Eds Krames, Elliot S., Peckham, P. Hunter & Rezai, Ali R. *Neuromodulation*. Academic Press, London, 2009, pages 639-647.
- Milby AH, Halpern CH, Schuster JM. Coagulopathy in spine surgery. Eds Brambrink A, Kirsch JR. *Essentials of Neurosurgical Anesthesia & Critical Care: Strategies for Prevention, Early Detection, and Successful Management of Perioperative Complications*. Springer, New York, 2012, pages 299-305.
- Halpern CH, Church E, Wolf JA, Bale TL, Stunkard AJ, Jaggi JL, Wadden T, Grady MS, Baltuch GH. Neurosurgery in the treatment of obesity. *Pathways to Obesity and Main Roads to Recovery*. Eds Vinai P. New York: Nova Inc., 2011.
- Halpern CH, Attiah M, Bale TL. Deep brain stimulation for the treatment of binge eating: mechanisms and preclinical models. *Animal Models of Eating Disorders*, ed. Avena N.

Abstracts (oral presentations)

- Halpern CH, Danish SF, Jaggi JL, Baltuch GH. Cerebrospinal fluid loss correlates with subcortical structure displacement during deep brain stimulation for Parkinson's disease. American Association of Neurological Surgeons, 2006.
- Whitmore RG, Halpern CH, Kapoor GS, Wolf RL, Baccon J, Krejza J, Bailey R, Lopinto J, Melhem ER, O'Rourke DM. Perfusion-Weighted Imaging Utilized to Identify MR Surrogates of EGFRvIII Alterations in Glioblastoma Multiforme. Italian Meeting of the Congress of Neurological Surgeons and the Pennsylvania Neurosurgical Society Annual Scientific Meeting, 2007.
- Bauman J, Halpern C, Danish S, Zaghoul K, Church E, Jaggi J, Baltuch B. Subcutaneous heparin for prophylaxis of deep venous thrombosis in deep brain stimulation surgery. American Society for Stereotactic and Functional Neurosurgery 2008.
- Halpern CH, Milby AH, Guo W, Schuster JM, Gracias VC, Stein SC. Clearance of the cervical spine in clinically unevaluable patients. Pan Philadelphia Neurosurgery Conference, 2009.
- Church E, Kilpatrick M, Halpern C, Robinson M, Lucki I, Jaggi J, Baltuch G. Intracerebral microdialysis during deep brain stimulation surgery for Parkinson's disease. American Association of Neurological Surgeons, 2009
- Church E, Halpern C, Kilpatrick M, Danish S, Stiefel M, Jaggi J, Maloney E, Kerr M, Robinson M, Lucki I, Baltuch G. Intracerebral microdialysis during deep brain stimulation surgery for Parkinson's disease. Pennsylvania Neurosurgical Society, 2010
- Pisapia JM, Halpern CH, Williams NN, Wadden TA, Baltuch GH, Stein SC. Deep Brain Stimulation Compared to Bariatric Surgery for the Treatment of Morbid Obesity: a Decision Analysis Study. Pennsylvania Neurosurgical Society Annual Scientific Meeting, 2010.
- Halpern CH, Kramer DR, Jaggi JL, Baltuch GH. Effect of intraventricular trajectory on brain shift in deep brain stimulation. American Society of Stereotactic and Functional Neurosurgery and Pennsylvania Neurosurgical Society Annual Scientific Meeting, 2010.
- Halpern C, Church E, Kilpatrick M, Robinson M, Lucki I, Jaggi J, Baltuch G. Intracerebral microdialysis of the subthalamic nucleus and substantia nigra during deep brain stimulation surgery for Parkinson's disease. American Association of Neurological Surgeons, 2011.
- Halpern CH, Keating JG, Wolf JA, Rodemer WC, Jaggi JL, Baltuch GH, Dichter MA, and Bale TL. Deep Brain Stimulation of the Nucleus Accumbens Attenuates Binge Eating in Mice: Preliminary Evidence for A Potential Therapeutic Role of Neuromodulation in Treatment-Refractory Obesity. Annual Meetings of the Congress of Neurological Surgeons and Pennsylvania Neurosurgical Society, 2011.
- Halpern C, Bale T. Therapeutic potential of deep brain stimulation for obesity: evidence from a mouse model of binge eating. Presented as platform presentation, Stress in Seattle, 2011.
- Halpern CH, Attiah M, Keating JG, Wolf JA, Rodemer WC, Jaggi JL, Baltuch GH, Dichter MA, Bale TL. Therapeutic potential of deep brain stimulation for obesity: evidence from a mouse model of binge eating. Annual Meeting of the Pennsylvania Neurosurgical Society, 2011.
- Stephen J, Halpern CH, Balmuri U, Barrios C, Wolf J, Hall W, Caplan A, Baltuch G, Kampman K, Stein SC. Deep brain stimulation compared with methadone maintenance for the treatment of heroin dependence: a decision-modelling threshold and cost-effectiveness analysis. Annual Meeting of the Pennsylvania Neurosurgical Society, 2011.
- Church E, Faught R, Halpern C, Balmuri U, Attiah M, Hayden S, Kerr M, Maloney-Wilensky E, Bynum J, Dante S, Welch W, Simeone F. Posterior cervical foraminotomy for cervical radiculopathy: Symptomatic and functional outcomes in 1085 cases with long-term follow-up. Annual Meeting of the Pennsylvania Neurosurgical Society, 2011.

- Halpern CH, Keating JG, Wolf JA, Rodemer WC, Jaggi JL, Baltuch GH, Dichter MA, Bale TL. Deep Brain Stimulation of the Nucleus Accumbens Attenuates Binge Eating: Preliminary Evidence for A Potential Therapeutic Role of Neuromodulation in Treatment-Refractory Obesity. Annual Meeting of the Congress of Neurological Surgeons, 2011.
- Church E, Faught R, Halpern C, Balmuri U, Attiah M, Hayden S, Kerr M, Maloney-Wilensky E, Bynum J, Dante S, Welch W, Simeone F. Posterior cervical foraminotomy for cervical radiculopathy: Symptomatic and functional outcomes in 1085 cases with long-term follow-up. Presented at the joint AANS/CNS meeting, 2012.
- Halpern CH, Keating JG, Wolf JA, Rodemer WC, Jaggi JL, Baltuch GH, Dichter MA, Bale TL. Nucleus accumbens deep brain stimulation suppresses binge eating in mice: a mechanistic approach. Presented at the Annual Meeting of the American Association of Neurological Surgeons, 2012.
- Vakshori V, Halpern CH, Sandhu S, Merkow M, Lee JY. Durability of neurosurgical intervention for trigeminal neuralgia. Annual Meeting of the Pennsylvania Neurosurgical Society, 2012.
- Halpern CH, Tekriwal A, Bale TL. Regional striatal variation in the DBS amelioration of binge eating: choosing a target for obesity. Presented at the Annual Meeting of the American Association of Neurological Surgeons, 2013.
- Halpern CH, Sandhu S, Vakshori V, Mirsaeedi-Farahani K, Kerr MT, Lee JYK. Brief Pain Inventory-Facial: calculation of the minimal clinically important difference in trigeminal neuralgia. To be presented at the Annual Meeting of the Congress of Neurological Surgeons, 2013

#### Abstracts (poster presentations)

- Halpern CH, McMillan CT, Moore PN, Dennis KE, Grossman M. Calculation impairment in neurodegenerative diseases. American Academy of Neurology and International Neuropsychological Society, 2003.
- McMillan C, Clark R, Dennis K, Moore P, Halpern C, Grossman M. Generalized quantifier comprehension in focal neurodegenerative disease. Cognitive Neuroscience Society, 2003.
- Halpern C, Glosser G, Moore P, Dennis K, McMillan C, Grossman M. Double dissociation of Corticobasal Degeneration and Semantic Dementia on number and object measures. Cognitive Neuroscience Society, 2003.
- Halpern C, Clark R, McMillan C, Gee J, Grossman M. Dissociating object knowledge and number knowledge in semantic dementia and corticobasal degeneration: Correlation with high-resolution MRI. *Brain and Language* 2003;87(1):98. *Academy of Aphasia*, 2003.
- Grossman M, Troiani V, Halpern C. The Neural Representation of Quantifiers in Healthy Young Adults. Cognitive Neuroscience Society, 2006.
- Halpern C, Clark R, Work M, Antani S, McCawley G, Moore P, Gee J, Grossman M. Vanishing small numbers in corticobasal degeneration: Correlation with high-resolution MRI. International Neuropsychological Society, 2006.
- Halpern CH, Udoetuk J, Bribriescio A, Taylor S, Pellegrini C, Bloom S, Reilly P, Stein SC. Traumatic coagulopathy: The effect of brain injury. Select abstract, Congress of Neurological Surgeons, 2006.
- Danish SF, Halpern CH, Baltuch GH. The history of deep brain stimulation. American Association of Neurological Surgeons, 2006.
- Whitmore RG, Halpern CH, Kapoor GS, Wolf RL, Baccon J, Krejza J, Bailey R, Lopinto J, Melhem ER, O'Rourke DM. Perfusion-Weighted Imaging Utilized to Identify MR Surrogates of EGFRvIII Alterations in Glioblastoma Multiforme. Select Abstract, Congress of Neurological Surgeons, Annual Meeting, 2007.
- Whitmore RG, Halpern CH, Kapoor GS, Wolf RL, Woo J, Baccon J, Chawla S, Oleaga L, Lopinto J, Plaum J, Melhem ER, O'Rourke DM. Perfusion-Weighted Imaging identifies MR Surrogates of Malignant Glioma Molecular Subtypes. Society of Neuro-Oncology, 2007.
- Whitmore RG, Chawla S, Halpern CH, Kapoor GS, Wolf RL, Woo J, Oleaga L, Lopinto J, Plaum J, Melhem ER, O'Rourke DM. Proton MR Spectroscopy Identifies Surrogates of Malignant Glioma Molecular Subtypes. Society of Neuro-Oncology, 2007.

- Halpern CH, Milby AH, Guo W, Schuster JM, Gracias VC, Stein SC. Clearance of the cervical spine in clinically unevaluable patients. Congress of Neurological Surgeons, Annual Meeting 2008.
- Srinivasan L, Pisapia J, Halpern CH, Shah SS, Harris MC. Can the 16S ribosomal RNA (rRNA) gene PCR improve the diagnosis of bacterial meningitis in children? A systematic review. Eastern Society for Pediatric Research.
- Kramer DR, Halpern CH, Buonacuore D, McGill K, Hurtig HI, Jaggi JL, Baltuch GH. Best Surgical Practices: a Step-wise Approach to the University of Pennsylvania Deep Brain Stimulation Protocol. American Society of Stereotactic and Functional Neurosurgery, 2010.
- Kramer DR, Church E, Halpern CH, Jaggi JL, Baltuch GH. Error Minimization After One Year Of Checklist Use for DBS Procedures. American Society of Stereotactic and Functional Neurosurgery and the Pennsylvania Neurosurgical Society, 2010
- Pisapia JM, Halpern CH, Williams NN, Wadden TA, Ph.D., Baltuch GH, Stein SC. Deep Brain Stimulation Compared to Bariatric Surgery for the Treatment of Morbid Obesity: a Decision Analysis Study. Annual Meeting of the Congress of Neurological Surgeons, 2010.
- Halpern CH, Gonzalez-Giraldo E, Aversano MW, Wolf JA, Juul HM, Keating JG, Rodemer WC, Browne KD, Smith DH, Baltuch GH, Dichter MA, and Bale TL. Establishing a role for mouse models in deep brain stimulation: evidence from an obesity model. Annual Meeting of the American Association of Neurological Surgeons, 2011.
- Mitchell GW, Halpern CH, Paul A, Kramer DR, McGill KR, Buonacuore D, Kerr M, Jaggi JL, Stern JJ, Baltuch GH. Self-administered, Pre-Operative Antiseptic Wash to Prevent Post-Operative Infection Following Deep Brain Stimulation. Annual Meeting of the American Association of Neurological Surgeons, 2011.
- Pisapia JM, Halpern CH, Grant R, Torres N, Halpern ER, Wolf JA, Williams NN, Vinai P, O'Reardon JP, Whiting DM, Wadden TA, Baltuch GH. Ethical Considerations for Deep Brain Stimulation in the Treatment of Obesity. Annual Meeting of the American Association of Neurological Surgeons, 2011.
- Pisapia JM, Halpern CH, Grant R, Torres N, Halpern ER, Wolf JA, Williams NN, Vinai P, O'Reardon JP, Whiting DM, Wadden TA, Baltuch GH. Ethical Considerations for Deep Brain Stimulation in the Treatment of Addiction. Annual Meeting of the Congress of Neurological Surgeons, 2011.
- Stephen JH, Halpern CH, Barrios CJ, Pisapia JM, Wolf JA, Baltuch GH, Stein SC. Deep brain stimulation compared with methadone maintenance for the treatment of heroin dependence: a success threshold and cost-effectiveness study. Annual Meeting of the Congress of Neurological Surgeons, 2011.
- Church E, Faught R, Halpern C, Balmuri U, Attiah M, Hayden S, Kerr M, Maloney-Wilensky E, Bynum J, Dante S, Welch W, Simeone F. Posterior cervical foraminotomy for cervical radiculopathy: Symptomatic and functional outcomes in 1085 cases with long-term follow-up. Select abstract at CNS Annual Meeting, 2011.
- Halpern CH, Keating JG, Wolf JA, Rodemer WC, Jaggi JL, Baltuch GH, Dichter MA, and Bale TL. Deep brain stimulation of the nucleus accumbens attenuates binge eating in mice: preliminary evidence for a potential therapeutic role of neuromodulation in treatment-refractory obesity. Society for Neuroscience, 2011.
- Church E, Halpern C, Faught R, Balmuri U, Attiah M, Hayden S, Kerr M, Maloney-Wilensky E, Bynum J, Dante S, Welch W, Simeone F. Long-term quality of life in patients undergoing posterior cervical foraminotomy for cervical radiculopathy. American Association of Neurological Surgeons, 2012.
- Madsen PJ, Halpern CH, Grossman M, Baltuch GH, Caplan AL. Ethical considerations for applying deep brain stimulation to memory enhancement in Alzheimer's disease. American Association of Neurological Surgeons, 2012.
- Halpern CH, Keating JG, Wolf JA, Jaggi JL, Baltuch GH, Dichter MA, and Bale TL. Nucleus accumbens deep brain stimulation of the attenuates binge eating in mice: preliminary evidence for a potential therapeutic role of neuromodulation in treatment-refractory obesity. Society of Biological Psychiatry, 2012.



- Siegel CM, Halpern CH, Bale TL. Sex-differences in amelioration of binge eating with nucleus accumbens deep brain stimulation. Annual Meeting of the Society of Biological Psychiatry, 2012.
- Halpern CH, Siegel CM, Keating JG, Bale TL. Modulation of the dopamine type 2 receptor with nucleus accumbens deep brain stimulation attenuates binge eating in mice. American Society of Stereotactic and Functional Neurosurgery, 2012.
- Difrancesco M, Halpern CH, Kampman K, Baltuch GH, Caplan A. Deep brain stimulation for the treatment of addiction: A survey of physicians and medical students. American Society of Stereotactic and Functional Neurosurgery, 2012.
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