

Stanford



Jaimie Henderson, MD

John and Jene Blume - Robert and Ruth Halperin Professor, Professor of Neurosurgery and, by courtesy, of Neurology

CLINICAL OFFICE (PRIMARY)

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ACADEMIC CONTACT INFORMATION

- Administrative Contact
Kathy Tsou
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Bio

CLINICAL FOCUS

- Functional Neurosurgery
- Movement Disorders
- Epilepsy
- Neurological Surgery
- Trigeminal Neuralgia
- Deep Brain Stimulation
- Neuromodulation

ACADEMIC APPOINTMENTS

- Professor - University Medical Line, Neurosurgery
- Professor - University Medical Line (By courtesy), Neurology
- Member, Bio-X
- Member, Wu Tsai Human Performance Alliance
- Member, Wu Tsai Neurosciences Institute

ADMINISTRATIVE APPOINTMENTS

- Director, Stereotactic and Functional Neurosurgery, (2004- present)

PROFESSIONAL EDUCATION

- Fellowship: Loma Linda University Neurosurgery Training Programs (1995) CA
- Residency: Saint Louis University GME Verifications (1995) MO
- Internship: Rush University Medical Center General Surgery Residency (1989) IL
- Medical Education: Rush University Office of the Registrar (1988) IL

- Board Certification: Neurological Surgery, American Board of Neurological Surgery (2000)
- M.D., Rush Medical College , Medicine (1988)
- B.A., Washington University, St. Louis , Biology (1984)

LINKS

- Get a Second Opinion: <https://stanfordhealthcare.org/second-opinion/overview.html>

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

My research interests encompass several areas of stereotactic and functional neurosurgery, including frameless stereotactic approaches for therapy delivery to deep brain nuclei; cortical physiology and its relationship to normal and pathological movement; brain-computer interfaces; and the development of novel neuromodulatory techniques for the treatment of movement disorders, epilepsy, pain, and other neurological diseases.

CLINICAL TRIALS

- BrainGate2: Feasibility Study of an Intracortical Neural Interface System for Persons With Tetraplegia, Recruiting
- FIH Study of NRTX-1001 Neural Cell Therapy in Drug-Resistant Unilateral Mesial Temporal Lobe Epilepsy, Recruiting

Teaching

STANFORD ADVISEES

Postdoctoral Faculty Sponsor

Nishal Shah

Doctoral Dissertation Co-Advisor (NonAC)

Alisa Levin, Benyamin Meschede-Krasa

Doctoral Dissertation Reader (NonAC)

Deniz Bingul, Erin Kunz

Doctoral (Program)

Chaofei Fan

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Neurosciences (Phd Program)

Publications

PUBLICATIONS

- **Thalamic deep brain stimulation in traumatic brain injury: a phase 1, randomized feasibility study.** *Nature medicine*
Schiff, N. D., Giacino, J. T., Butson, C. R., Choi, E. Y., Baker, J. L., O'Sullivan, K. P., Janson, A. P., Bergin, M., Bronte-Stewart, H. M., Chua, J., DeGeorge, L., Dikmen, S., Fogarty, et al
2023
- **A high-performance speech neuroprosthesis.** *Nature*
Willett, F. R., Kunz, E. M., Fan, C., Avansino, D. T., Wilson, G. H., Choi, E. Y., Kamdar, F., Glasser, M. F., Hochberg, L. R., Druckmann, S., Shenoy, K. V., Henderson, J. M.
2023
- **High-performance brain-to-text communication via handwriting.** *Nature*
Willett, F. R., Avansino, D. T., Hochberg, L. R., Henderson, J. M., Shenoy, K. V.

2021; 593 (7858): 249–54

● **Deep posteromedial cortical rhythm in dissociation.** *Nature*

Vesuna, S., Kauvar, I. V., Richman, E., Gore, F., Oskotsky, T., Sava-Segal, C., Luo, L., Malenka, R. C., Henderson, J. M., Nuyujukian, P., Parvizi, J., Deisseroth, K., 2020

● **Hand Knob Area of Premotor Cortex Represents the Whole Body in a Compositional Way.** *Cell*

Willett, F. R., Deo, D. R., Avansino, D. T., Rezaii, P., Hochberg, L. R., Henderson, J. M., Shenoy, K. V., 2020

● **Neural ensemble dynamics in dorsal motor cortex during speech in people with paralysis.** *eLife*

Stavisky, S. D., Willett, F. R., Wilson, G. H., Murphy, B. A., Rezaii, P., Avansino, D. T., Memberg, W. D., Miller, J. P., Kirsch, R. F., Hochberg, L. R., Ajiboye, A. B., Druckmann, S., Shenoy, et al, 2019; 8

● **High performance communication by people with paralysis using an intracortical brain-computer interface.** *eLife*

Pandarinath, C., Nuyujukian, P., Blabe, C. H., Sorice, B. L., Saab, J., Willett, F. R., Hochberg, L. R., Shenoy, K. V., Henderson, J. M., 2017; 6

● **Clinical translation of a high-performance neural prosthesis.** *Nature medicine*

Gilja, V., Pandarinath, C., Blabe, C. H., Nuyujukian, P., Simmeral, J. D., Sarma, A. A., Sorice, B. L., Perge, J. A., Jarosiewicz, B., Hochberg, L. R., Shenoy, K. V., Henderson, J. M., 2015; 21 (10): 1142-1145

● **Measuring instability in chronic human intracortical neural recordings towards stable, long-term brain-computer interfaces.** *bioRxiv : the preprint server for biology*

Pun, T. K., Khoshnevis, M., Hosman, T., Wilson, G. H., Kapitonava, A., Kamdar, F., Henderson, J. M., Simmeral, J. D., Vargas-Irwin, C. E., Harrison, M. T., Hochberg, L. R., 2024

● **A real-time, high-performance brain-computer interface for finger decoding and quadcopter control.** *bioRxiv : the preprint server for biology*

Willsey, M. S., Shah, N. P., Avansino, D. T., Hahn, N. V., Jamiolkowski, R. M., Kamdar, F. B., Hochberg, L. R., Willett, F. R., Henderson, J. M., 2024

● **Brain control of bimanual movement enabled by recurrent neural networks.** *Scientific reports*

Deo, D. R., Willett, F. R., Avansino, D. T., Hochberg, L. R., Henderson, J. M., Shenoy, K. V., 2024; 14 (1): 1598

● **Stimulation of the thalamus for arousal restoration in temporal lobe epilepsy (START) clinical trial**

Blumenfeld, H., Yadav, T., Zhang, Z., Benjamin, C., DaCosta, K., Christison-Lagay, K., Damisah, E., Derry, A., Gummadavelli, A., Hirsch, L., Oriol, M., Litvinov, B., Spencer, et al, WILEY.2023: 52

● **Subject and Family Perspectives from the Central Thalamic Deep Brain Stimulation Trial for Traumatic Brain Injury: Part II.** *Cambridge quarterly of healthcare ethics : CQ : the international journal of healthcare ethics committees*

Fins, J. J., Wright, M. S., Shulman, K. S., Henderson, J. M., Schiff, N. D., 2023: 1-24

● **Pseudo-linear Summation explains Neural Geometry of Multi-finger Movements in Human Premotor Cortex.** *bioRxiv : the preprint server for biology*

Shah, N. P., Avansino, D., Kamdar, F., Nicolas, C., Kapitonava, A., Vargas-Irwin, C., Hochberg, L., Pandarinath, C., Shenoy, K., Willett, F. R., Henderson, J. 2023

● **An Individualized Tractography Pipeline for the Nucleus Basalis of Meynert Lateral Tract.** *medRxiv : the preprint server for health sciences*

Crockett, R. A., Wilkins, K. B., Zeineh, M. M., McNab, J. A., Henderson, J. M., Buch, V. P., Brontë-Stewart, H. M., 2023

● **Translating deep learning to neuroprosthetic control.** *bioRxiv : the preprint server for biology*

Deo, D. R., Willett, F. R., Avansino, D. T., Hochberg, L. R., Henderson, J. M., Shenoy, K. V., 2023

- **A brain-computer typing interface using finger movements.** *International IEEE/EMBS Conference on Neural Engineering : [proceedings]. International IEEE EMBS Conference on Neural Engineering*
Shah, N. P., Willsey, M. S., Hahn, N., Kamdar, F., Avansino, D. T., Hochberg, L. R., Shenoy, K. V., Henderson, J. M.
2023; 2023
- **Long-term unsupervised recalibration of cursor BCIs.** *bioRxiv : the preprint server for biology*
Wilson, G. H., Willett, F. R., Stein, E. A., Kamdar, F., Avansino, D. T., Hochberg, L. R., Shenoy, K. V., Druckmann, S., Henderson, J. M.
2023
- **Interim Safety Profile From the Feasibility Study of the BrainGate Neural Interface System.** *Neurology*
Rubin, D. B., Ajiboye, A. B., Barefoot, L., Bowker, M., Cash, S. S., Chen, D., Donoghue, J. P., Eskandar, E. N., Friehs, G., Grant, C., Henderson, J. M., Kirsch, R. F., Marujo, et al
2023
- **Subject and Family Perspectives from the Central Thalamic Deep Brain Stimulation for Traumatic Brain Injury Study: Part I.** *Cambridge quarterly of healthcare ethics : CQ : the international journal of healthcare ethics committees*
Fins, J. J., Wright, M. S., Henderson, J. M., Schiff, N. D.
2022; 31 (4): 419-443
- **Changes In The Cerebello-thalamo-cortical Network After MR-guided Focused Ultrasound Thalamotomy.** *Brain connectivity*
Thaler, C., Tian, Q., WIntermark, M., Ghanouni, P., Halpern, C., Henderson, J., Airan, R., Zeineh, M., Goubran, M., Leuze, C., Fiehler, J., Butts Pauly, K., McNab, et al
2022
- **A Retrospective Cohort Study of Implantable Pulse Generator Surgical Site Infections After Deep Brain Stimulation Surgery With an Antibacterial Envelope.** *Neuromodulation : journal of the International Neuromodulation Society*
Sayadi, J. J., Rodrigues, A. J., Patel, N. A., Ayer, A., Henderson, J. M.
2022
- **Proceedings of the Ninth Annual Deep Brain Stimulation Think Tank: Advances in Cutting Edge Technologies, Artificial Intelligence, Neuromodulation, Neuroethics, Pain, Interventional Psychiatry, Epilepsy, and Traumatic Brain Injury.** *Frontiers in human neuroscience*
Wong, J. K., Deuschl, G., Wolke, R., Bergman, H., Muthuraman, M., Groppa, S., Sheth, S. A., Bronte-Stewart, H. M., Wilkins, K. B., Petrucci, M. N., Lambert, E., Kehnemouyi, Y., Starr, et al
2022; 16: 813387
- **Proceedings of the 10th annual deep brain stimulation think tank: Advances in cutting edge technologies, artificial intelligence, neuromodulation, neuroethics, interventional psychiatry, and women in neuromodulation.** *Frontiers in human neuroscience*
Wong, J. K., Mayberg, H. S., Wang, D. D., Richardson, R. M., Halpern, C. H., Krinke, L., Arlotti, M., Rossi, L., Priori, A., Marceglia, S., Gilron, R., Cavanagh, J. F., Judy, et al
2022; 16: 1084782
- **Next-generation BCIs: Brain-to-text Communication via Attempted Handwriting**
Willett, F. R., Avansino, D. T., Hochberg, L. R., Henderson, J. M., Shenoy, K. V., IEEE
IEEE.2022
- **Experience and consensus on stimulation of the anterior nucleus of thalamus for epilepsy.** *Epilepsia*
Fasano, A., Eliashiv, D., Herman, S. T., Lundstrom, B. N., Polnerow, D., Henderson, J. M., Fisher, R. S.
2021
- **Lack of progression of beta dynamics after long-term subthalamic neurostimulation.** *Annals of clinical and translational neurology*
Anderson, R. W., Wilkins, K. B., Parker, J. E., Petrucci, M. N., Kehnemouyi, Y., Neuville, R. S., Cassini, D., Trager, M. H., Koop, M. M., Velisar, A., Blumenfeld, Z., Quinn, E. J., Henderson, et al
2021
- **Effects of Peripheral Haptic Feedback on Intracortical Brain-Computer Interface Control and Associated Sensory Responses in Motor Cortex** *IEEE TRANSACTIONS ON HAPTICS*
Deo, D. R., Rezaii, P., Hochberg, L. R., Okamura, A. M., Shenoy, K., Henderson, J. M.
2021; 14 (4): 762-775
- **Altered sense of self during seizures in the posteromedial cortex.** *Proceedings of the National Academy of Sciences of the United States of America*
Parvizi, J., Braga, R. M., Kucyi, A., Veit, M. J., Pinheiro-Chagas, P., Perry, C., Sava-Segal, C., Zeineh, M., van Staalduin, E. K., Henderson, J. M., Markert, M.

2021; 118 (29)

- **Home Use of a Percutaneous Wireless Intracortical Brain-Computer Interface by Individuals With Tetraplegia** *IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING*
 Simeral, J. D., Hosman, T., Saab, J., Flesher, S. N., Vilela, M., Franco, B., Kelemen, J. N., Brandman, D. M., Ciancibello, J. G., Rezaii, P. G., Eskandar, E. N., Rosler, D. M., Shenoy, et al
 2021; 68 (7): 2313-2325
- **Empiricism and Rights Justify the Allocation of Health Care Resources to Persons with Disorders of Consciousness.** *AJOB neuroscience*
 Giacino, J. T., Bodien, Y. G., Zuckerman, D., Henderson, J., Schiff, N. D., Fins, J. J.
 2021; 12 (2-3): 169–71
- **In Pursuit of Agency Ex Machina: Expanding the Map in Severe Brain Injury.** *AJOB neuroscience*
 Fins, J. J., Wright, M. S., Giacino, J. T., Henderson, J., Schiff, N. D.
 2021; 12 (2-3): 200–202
- **Commentary: Congress of Neurological Surgeons Systematic Review and Evidence-Based Guidelines for Deep Brain Stimulations for Obsessive Compulsive Disorder: Update of the 2014 Guidelines.** *Neurosurgery*
 Henderson, J. M.
 2021
- **The Neural Representation of Force across Grasp Types in Motor Cortex of Humans with Tetraplegia.** *eNeuro*
 Rastogi, A., Willett, F. R., Abreu, J., Crowder, D. C., Murphy, B. A., Memberg, W. D., Vargas-Irwin, C. E., Miller, J. P., Sweet, J., Walter, B. L., Rezaii, P. G., Stavisky, S. D., Hochberg, et al
 2021
- **Decoding spoken English from intracortical electrode arrays in dorsal precentral gyrus.** *Journal of neural engineering*
 Wilson, G. H., Stavisky, S. D., Willett, F. R., Avansino, D. T., Kelemen, J. N., Hochberg, L. R., Henderson, J. M., Druckmann, S., Shenoy, K. V.
 2020; 17 (6): 066007
- **Power-saving design opportunities for wireless intracortical brain-computer interfaces.** *Nature biomedical engineering*
 Even-Chen, N., Muratore, D. G., Stavisky, S. D., Hochberg, L. R., Henderson, J. M., Murmann, B., Shenoy, K. V.
 2020
- **Impact of skull density ratio on efficacy and safety of magnetic resonance-guided focused ultrasound treatment of essential tremor** *JOURNAL OF NEUROSURGERY*
 D'Souza, M., Chen, K. S., Rosenberg, J., Elias, W., Eisenberg, H. M., Gwinn, R., Taira, T., Chang, J., Lipsman, N., Krishna, V., Igase, K., Yamada, K., Kishima, et al
 2020; 132 (5): 1392–97
- **Speech-related dorsal motor cortex activity does not interfere with iBCI cursor control.** *Journal of neural engineering*
 Stavisky, S. D., Willett, F. R., Avansino, D. T., Hochberg, L. R., Shenoy, K. V., Henderson, J. M.
 2020; 17 (1): 016049
- **Neural Representation of Observed, Imagined, and Attempted Grasping Force in Motor Cortex of Individuals with Chronic Tetraplegia.** *Scientific reports*
 Rastogi, A. n., Vargas-Irwin, C. E., Willett, F. R., Abreu, J. n., Crowder, D. C., Murphy, B. A., Memberg, W. D., Miller, J. P., Sweet, J. A., Walter, B. L., Cash, S. S., Rezaii, P. G., Franco, et al
 2020; 10 (1): 1429
- **Improved Vim targeting for focused ultrasound ablation treatment of essential tremor: A probabilistic and patient-specific approach.** *Human brain mapping*
 Su, J. H., Choi, E. Y., Toudias, T. n., Saranathan, M. n., Halpern, C. H., Henderson, J. M., Pauly, K. B., Ghanouni, P. n., Rutt, B. K.
 2020
- **Anatomic and Thermometric Analysis of Cranial Nerve Palsy after Laser Amygdalohippocampotomy for Mesial Temporal Lobe Epilepsy.** *Operative neurosurgery (Hagerstown, Md.)*
 Huang, Y., Leung, S. A., Parker, J. J., Ho, A. L., Wintermark, M., Patel, S. H., Pauly, K. B., Kakusa, B. W., Beres, S. J., Henderson, J. M., Grant, G. A., Halpern, C. H.
 2019
- **Volitional control of single-electrode high gamma local field potentials by people with paralysis** *JOURNAL OF NEUROPHYSIOLOGY*

- Milekovic, T., Bacher, D., Sarma, A. A., Simeral, J. D., Saab, J., Pandarinath, C., Yvert, B., Sorice, B. L., Blabe, C., Oakley, E. M., Tringale, K. R., Eskandar, E., Cash, et al
2019; 121 (4): 1428–50
- **Impact of skull density ratio on efficacy and safety of magnetic resonance-guided focused ultrasound treatment of essential tremor.** *Journal of neurosurgery*
D'Souza, M. n., Chen, K. S., Rosenberg, J. n., Elias, W. J., Eisenberg, H. M., Gwinn, R. n., Taira, T. n., Chang, J. W., Lipsman, N. n., Krishna, V. n., Igase, K. n., Yamada, K. n., Kishima, et al
2019: 1–6
 - **Robot-assisted versus manual navigated stereoelectroencephalography in adult medically-refractory epilepsy patients.** *Epilepsy research*
Kim, L. H., Feng, A. Y., Ho, A. L., Parker, J. J., Kumar, K. K., Chen, K. S., Grant, G. A., Henderson, J. M., Halpern, C. H.
2019; 159: 106253
 - **Principled BCI Decoder Design and Parameter Selection Using a Feedback Control Model.** *Scientific reports*
Willett, F. R., Young, D. R., Murphy, B. A., Memberg, W. D., Blabe, C. H., Pandarinath, C. n., Stavisky, S. D., Rezaii, P. n., Saab, J. n., Walter, B. L., Sweet, J. A., Miller, J. P., Henderson, et al
2019; 9 (1): 8881
 - **Cortical control of a tablet computer by people with paralysis** *PLOS ONE*
Nuyujukian, P., Sanabria, J., Saab, J., Pandarinath, C., Jarosiewicz, B., Blabe, C. H., Franco, B., Mernoff, S. T., Eskandar, E. N., Simeral, J. D., Hochberg, L. R., Shenoy, K., Henderson, et al
2018; 13 (11)
 - **Brain-machine interface cursor position only weakly affects monkey and human motor cortical activity in the absence of arm movements.** *Scientific reports*
Stavisky, S. D., Kao, J. C., Nuyujukian, P., Pandarinath, C., Blabe, C., Ryu, S. I., Hochberg, L. R., Henderson, J. M., Shenoy, K. V.
2018; 8 (1): 16357
 - **Laser interstitial thermal therapy (LITT): Seizure outcomes for refractory mesial temporal lobe epilepsy.** *Epilepsy & behavior : E&B*
Le, S., Ho, A. L., Fisher, R. S., Miller, K. J., Henderson, J. M., Grant, G. A., Meador, K. J., Halpern, C. H.
2018; 89: 37–41
 - **Inferring single-trial neural population dynamics using sequential auto-encoders** *NATURE METHODS*
Pandarinath, C., O'Shea, D. J., Collins, J., Jozefowicz, R., Stavisky, S. D., Kao, J. C., Trautmann, E. M., Kaufman, M. T., Ryu, S. I., Hochberg, L. R., Henderson, J. M., Shenoy, K. V., Abbott, et al
2018; 15 (10): 805–+
 - **A Comparison of Intention Estimation Methods for Decoder Calibration in Intracortical Brain-Computer Interfaces** *IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING*
Willett, F. R., Murphy, B. A., Young, D., Memberg, W. D., Blabe, C. H., Pandarinath, C., Franco, B., Saab, J., Walter, B. L., Sweet, J. A., Miller, J. P., Henderson, J. M., Shenoy, et al
2018; 65 (9): 2066–78
 - **Awake versus asleep deep brain stimulation for Parkinson's disease: a critical comparison and meta-analysis** *JOURNAL OF NEUROLOGY, NEUROSURGERY AND PSYCHIATRY*
Ho, A. L., Ali, R., Connolly, I. D., Henderson, J. M., Dhall, R., Stein, S. C., Halpern, C. H.
2018; 89 (7): 687–91
 - **Novel application of virtual reality in patient engagement for deep brain stimulation: A pilot study** *BRAIN STIMULATION*
Collins, M. K., Ding, V. Y., Ball, R. L., Dolce, D. L., Henderson, J. M., Halpern, C. H.
2018; 11 (4): 935–37
 - **Rapid calibration of an intracortical brain-computer interface for people with tetraplegia.** *Journal of neural engineering*
Brandman, D. M., Hosman, T. n., Saab, J. n., Burkhardt, M. C., Shanahan, B. E., Ciancibello, J. G., Sarma, A. A., Milstein, D. J., Vargas-Irwin, C. E., Franco, B. n., Kelemen, J. n., Blabe, C. n., Murphy, et al
2018; 15 (2): 026007
 - **Decoding Speech from Intracortical Multielectrode Arrays in Dorsal "Arm/Hand Areas" of Human Motor Cortex**
Stavisky, S. D., Rezaii, P., Willett, F. R., Hochberg, L. R., Shenoy, K., Henderson, J. M., IEEE
IEEE.2018: 93–97
 - **Diffusion MRI tractography for improved transcranial MRI-guided focused ultrasound thalamotomy targeting for essential tremor** *NEUROIMAGE-CLINICAL*

- Tian, Q., Wintermark, M., Elias, W., Ghanouni, P., Halpern, C. H., Henderson, J. M., Huss, D. S., Goubran, M., Thaler, C., Airan, R., Zeineh, M., Pauly, K., McNab, et al
2018; 19: 572–80
- **Cortical control of a tablet computer by people with paralysis.** *PloS one*
Nuyujukian, P., Albites Sanabria, J., Saab, J., Pandarinath, C., Jarosiewicz, B., Blabe, C. H., Franco, B., Mernoff, S. T., Eskandar, E. N., Simeral, J. D., Hochberg, L. R., Shenoy, K. V., Henderson, et al
2018; 13 (11): e0204566
 - **Feasibility of Automatic Error Detect-and-Undo System in Human Intracortical Brain-Computer Interfaces.** *IEEE transactions on bio-medical engineering*
Even-Chen, N. n., Stavisky, S. D., Pandarinath, C. n., Nuyujukian, P. n., Blabe, C. H., Hochberg, L. R., Henderson, J. M., Shenoy, K. V.
2018; 65 (8): 1771–84
 - **Diffusion MRI tractography for improved transcranial MRI-guided focused ultrasound thalamotomy targeting for essential tremor.** *NeuroImage. Clinical*
Tian, Q., Wintermark, M., Jeffrey Elias, W., Ghanouni, P., Halpern, C. H., Henderson, J. M., Huss, D. S., Goubran, M., Thaler, C., Airan, R., Zeineh, M., Pauly, K. B., McNab, et al
2018; 19: 572–80
 - **Stable long-term BCI-enabled communication in ALS and locked-in syndrome using LFP signals.** *Journal of neurophysiology*
Milekovic, T. n., Sarma, A. A., Bacher, D. n., Simeral, J. D., Saab, J. n., Pandarinath, C. n., Sorice, B. L., Blabe, C. n., Oakley, E. M., Tringale, K. R., Eskandar, E. n., Cash, S. S., Henderson, et al
2018
 - **A prospective trial of magnetic resonance-guided focused ultrasound thalamotomy for essential tremor: Results at the 2-year follow-up.** *Annals of neurology*
Chang, J. W., Park, C. K., Lipsman, N. n., Schwartz, M. L., Ghanouni, P. n., Henderson, J. M., Gwinn, R. n., Witt, J. n., Tierney, T. S., Cosgrove, G. R., Shah, B. B., Abe, K. n., Taira, et al
2018; 83 (1): 107–14
 - **gene therapy trial for Parkinson's disease.** *JCI insight*
Niethammer, M., Tang, C. C., LeWitt, P. A., Rezai, A. R., Leehey, M. A., Ojemann, S. G., Flaherty, A. W., Eskandar, E. N., Kostyk, S. K., Sarkar, A., Siddiqui, M. S., Tatter, S. B., Schwalb, et al
2017; 2 (7)
 - **Awake versus asleep deep brain stimulation for Parkinson's disease: a critical comparison and meta-analysis.** *Journal of neurology, neurosurgery, and psychiatry*
Ho, A. L., Ali, R., Connolly, I. D., Henderson, J. M., Dhall, R., Stein, S. C., Halpern, C. H.
2017
 - **Feedback control policies employed by people using intracortical brain-computer interfaces** *JOURNAL OF NEURAL ENGINEERING*
Willett, F. R., Pandarinath, C., Jarosiewicz, B., Murphy, B. A., Memberg, W. D., Blabe, C. H., Saab, J., Walter, B. L., Sweet, J. A., Miller, J. P., Henderson, J. M., Shenoy, K. V., Simeral, et al
2017; 14 (1)
 - **Signal-independent noise in intracortical brain-computer interfaces causes movement time properties inconsistent with Fitts' law.** *Journal of neural engineering*
Willett, F. R., Murphy, B. A., Memberg, W. D., Blabe, C. H., Pandarinath, C. n., Walter, B. L., Sweet, J. A., Miller, J. P., Henderson, J. M., Shenoy, K. V., Hochberg, L. R., Kirsch, R. F., Ajiboye, et al
2017; 14 (2): 026010
 - **Subcallosal cingulate deep brain stimulation for treatment-resistant depression: a multisite, randomised, sham-controlled trial.** *The lancet. Psychiatry*
Holtzheimer, P. E., Husain, M. M., Lisanby, S. H., Taylor, S. F., Whitworth, L. A., McClintonck, S. n., Slavin, K. V., Berman, J. n., McKhann, G. M., Patil, P. G., Rittberg, B. R., Abosch, A. n., Pandurangi, et al
2017; 4 (11): 839–49
 - **Transcranial MRI-guided high-intensity focused ultrasound for treatment of essential tremor: A pilot study on the correlation between lesion size, lesion location, thermal dose, and clinical outcome.** *Journal of magnetic resonance imaging : JMRI*
Federau, C. n., Goubran, M. n., Rosenberg, J. n., Henderson, J. n., Halpern, C. H., Santini, V. n., Wintermark, M. n., Butts Pauly, K. n., Ghanouni, P. n.
2017
 - **Subthalamic oscillations and phase amplitude coupling are greater in the more affected hemisphere in Parkinson's disease.** *Clinical neurophysiology*

- Shreve, L. A., Velisar, A., Malekmohammadi, M., Koop, M. M., Trager, M., Quinn, E. J., Hill, B. C., Blumenfeld, Z., Kilbane, C., Mantovani, A., Henderson, J. M., Brontë-Stewart, H. 2017; 128 (1): 128-137
- **The neurosurgical origins of image-guided surgery** *CURRENT PROBLEMS IN SURGERY*
Barrese, J. C., Henderson, J. M.
2015; 52 (12): 476-520
 - **Virtual typing by people with tetraplegia using a self-calibrating intracortical brain-computer interface.** *Science translational medicine*
Jarosiewicz, B., Sarma, A. A., Bacher, D., Masse, N. Y., Simmerl, J. D., Sorice, B., Oakley, E. M., Blabe, C., Pandarinath, C., Gilja, V., Cash, S. S., Eskandar, E. N., Friehs, et al
2015; 7 (313): 313ra179-?
 - **Beta Oscillations in Freely Moving Parkinson's Subjects Are Attenuated During Deep Brain Stimulation** *MOVEMENT DISORDERS*
Quinn, E. J., Blumenfeld, Z., Velisar, A., Koop, M. M., Shreve, L. A., Trager, M. H., Hill, B. C., Kilbane, C., Henderson, J. M., Brontë-Stewart, H.
2015; 30 (13): 1750-1758
 - **Beta oscillations in freely moving Parkinson's subjects are attenuated during deep brain stimulation.** *Movement disorders : official journal of the Movement Disorder Society*
Quinn, E. J., Blumenfeld, Z., Velisar, A., Koop, M. M., Shreve, L. A., Trager, M. H., Hill, B. C., Kilbane, C., Henderson, J. M., Brontë-Stewart, H.
2015; 30 (13): 1750-8
 - **Gene delivery of neurturin to putamen and substantia nigra in Parkinson disease: A double-blind, randomized, controlled trial** *ANNALS OF NEUROLOGY*
Olanow, C. W., Bartus, R. T., Baumann, T. L., Factor, S., Boulis, N., Stacy, M., Turner, D. A., Marks, W., Larson, P., Starr, P. A., Jankovic, J., Simpson, R., Watts, et al
2015; 78 (2): 248-257
 - **Gene delivery of neurturin to putamen and substantia nigra in Parkinson disease: A double-blind, randomized, controlled trial.** *Annals of neurology*
Warren Olanow, C., Bartus, R. T., Baumann, T. L., Factor, S., Boulis, N., Stacy, M., Turner, D. A., Marks, W., Larson, P., Starr, P. A., Jankovic, J., Simpson, R., Watts, et al
2015; 78 (2): 248-57
 - **Assessment of brain-machine interfaces from the perspective of people with paralysis** *JOURNAL OF NEURAL ENGINEERING*
Blabe, C. H., Gilja, V., Chestek, C. A., Shenoy, K. V., Anderson, K. D., Henderson, J. M.
2015; 12 (4)
 - **Transcranial MRI-Guided Focused Ultrasound: A Review of the Technologic and Neurologic Applications** *AMERICAN JOURNAL OF ROENTGENOLOGY*
Ghanouni, P., Pauly, K. B., Elias, W. J., Henderson, J., Sheehan, J., Monteith, S., Wintermark, M.
2015; 205 (1): 150-159
 - **Neural population dynamics in human motor cortex during movements in people with ALS** *ELIFE*
Pandarinath, C., Gilja, V., Blabe, C. H., Nuyujukian, P., Sarma, A. A., Sorice, B. L., Eskandar, E. N., Hochberg, L. R., Henderson, J. M., Shenoy, K. V.
2015; 4
 - **Sixty Hertz Neurostimulation Amplifies Subthalamic Neural Synchrony in Parkinson's Disease** *PLOS ONE*
Blumenfeld, Z., Velisar, A., Koop, M. M., Hill, B. C., Shreve, L. A., Quinn, E. J., Kilbane, C., Yu, H., Henderson, J. M., Brontë-Stewart, H.
2015; 10 (3)
 - **Long-term efficacy and safety of thalamic stimulation for drug-resistant partial epilepsy.** *Neurology*
Salanova, V., Witt, T., Worth, R., Henry, T. R., Gross, R. E., Nazzaro, J. M., Labar, D., Sperling, M. R., Sharan, A., Sandok, E., Handforth, A., Stern, J. M., Chung, et al
2015; 84 (10): 1017-1025
 - **Lack of efficacy of motor cortex stimulation for the treatment of neuropathic pain in 14 patients.** *Neuromodulation*
Sachs, A. J., Babu, H., Su, Y., Miller, K. J., Henderson, J. M.
2014; 17 (4): 303-311
 - **194 High Performance Computer Cursor Control Using Neuronal Ensemble Recordings From the Motor Cortex of a Person With ALS.** *Neurosurgery*
Henderson, J. M., Gilja, V., Pandarinath, C., Blabe, C., Hochberg, L. R., Shenoy, K. V.
2013; 60: 184-?

- **Hand posture classification using electrocorticography signals in the gamma band over human sensorimotor brain areas** *JOURNAL OF NEURAL ENGINEERING*
Chestek, C. A., Gilja, V., Blabe, C. H., Foster, B. L., Shenoy, K. V., Parvizi, J., Henderson, J. M.
2013; 10 (2)
- **Deep brain stimulation surgical techniques.** *Handbook of clinical neurology*
Khan, F. R., Henderson, J. M.
2013; 116: 27-37
- **High frequency deep brain stimulation attenuates subthalamic and cortical rhythms in Parkinson's disease** *FRONTIERS IN HUMAN NEUROSCIENCE*
Whitmer, D., de Solages, C., Hill, B., Yu, H., Henderson, J. M., Bronte-Stewart, H.
2012; 6
- **Does Ganglionectomy Still Have a Role in the Era of Neuromodulation?** *WORLD NEUROSURGERY*
Khan, F. R., Henderson, J. M.
2012; 77 (2): 280-282
- **"Connectomic surgery": diffusion tensor imaging (DTI) tractography as a targeting modality for surgical modulation of neural networks.** *Frontiers in integrative neuroscience*
Henderson, J. M.
2012; 6: 15-?
- **Optogenetic Neuromodulation** *EMERGING HORIZONS IN NEUROMODULATION: NEW FRONTIERS IN BRAIN AND SPINE STIMULATION*
Kalanithi, P. S., Henderson, J. M.
2012; 107: 185-205
- **Maximal subthalamic beta hypersynchrony of the local field potential in Parkinson's disease is located in the central region of the nucleus** *JOURNAL OF NEUROLOGY NEUROSURGERY AND PSYCHIATRY*
de Solages, C., Hill, B. C., Yu, H., Henderson, J. M., Bronte-Stewart, H.
2011; 82 (12): 1387-1389
- **Incidence and Avoidance of Neurologic Complications with Paddle Type Spinal Cord Stimulation Leads** *NEUROMODULATION*
Levy, R., Henderson, J., Slavin, K., Simpson, B. A., Barolat, G., Shipley, J., North, R.
2011; 14 (5): 412-422
- **Human Subthalamic Neuron Spiking Exhibits Subtle Responses to Sedatives** *ANESTHESIOLOGY*
MacIver, M. B., Bronte-Stewart, H. M., Henderson, J. M., Jaffe, R. A., Brock-Utne, J. G.
2011; 115 (2): 254-264
- **Challenges and Opportunities for Next-Generation Intracortically Based Neural Prostheses** *IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING*
Gilja, V., Chestek, C. A., Diester, I., Henderson, J. M., Deisseroth, K., Shenoy, K. V.
2011; 58 (7): 1891-1899
- **Spinal Cord Stimulation Versus Re-operation in Patients With Failed Back Surgery Syndrome: An International Multicenter Randomized Controlled Trial (EVIDENCE Study)** *NEUROMODULATION*
North, R. B., Kumar, K., Wallace, M. S., Henderson, J. M., Shipley, J., Hernandez, J., Mekel-Bobrov, N., Jaax, K. N.
2011; 14 (4): 330-335
- **Long-Term Outcomes of Spinal Cord Stimulation With Paddle Leads in the Treatment of Complex Regional Pain Syndrome and Failed Back Surgery Syndrome** *NEUROMODULATION*
Sears, N. C., Machado, A. G., Nagel, S. J., Deogaonkar, M., Stanton-Hicks, M., Rezai, A. R., Henderson, J. M.
2011; 14 (4): 312-318
- **OPTOGENETICS: BACKGROUND AND CONCEPTS FOR NEUROSURGERY** *NEUROSURGERY*
Lin, S., Deisseroth, K., Henderson, J. M.
2011; 69 (1): 1-3
- **AAV2-GAD gene therapy for advanced Parkinson's disease: a double-blind, sham-surgery controlled, randomised trial** *LANCET NEUROLOGY*
LeWitt, P. A., Rezai, A. R., Leehey, M. A., Ojemann, S. G., Flaherty, A. W., Eskandar, E. N., Kostyk, S. K., Thomas, K., Sarkar, A., Siddiqui, M. S., Tatter, S. B., Schwalb, J. M., Poston, et al

2011; 10 (4): 309-319

● **Deep Brain Stimulation for Tourette Syndrome: A Prospective Pilot Study in Japan** COMMENTS *NEUROMODULATION*

Henderson, J.

2011; 14 (2): 129

● **Deep Brain Stimulation in "On"-State Parkinson Hyperpyrexia** *NEUROLOGY*

Klepitskaya, O., Cole, W., Henderson, J., Bronte-Stewart, H.

2011; 76 (7): S69-S71

● **Deep Brain Stimulation for Parkinson Disease An Expert Consensus and Review of Key Issues** *ARCHIVES OF NEUROLOGY*

Bronstein, J. M., Tagliati, M., Alterman, R. L., Lozano, A. M., Volkmann, J., Stefani, A., Horak, F. B., Okun, M. S., Foote, K. D., Krack, P., Pahwa, R., Henderson, J. M., Hariz, et al

2011; 68 (2): 165-171

● **Probabilistic analysis of activation volumes generated during deep brain stimulation** *NEUROIMAGE*

Butson, C. R., Cooper, S. E., Henderson, J. M., Wolgamuth, B., McIntyre, C. C.

2011; 54 (3): 2096-2104

● **Clinical Motor Outcome of Bilateral Subthalamic Nucleus Deep-Brain Stimulation for Parkinson's Disease Using Image-Guided Frameless Stereotaxy** *NEUROSURGERY*

Bronte-Stewart, H., Louie, S., Batya, S., Henderson, J. M.

2010; 67 (4): 1088-1093

● **A Socioeconomic Survey of Spinal Cord Stimulation (SCS) Surgery** *NEUROMODULATION*

Lad, S. P., Kalanithi, P. S., Arrigo, R. T., Patil, C. G., Nathan, J. K., Boakye, M., Henderson, J. M.

2010; 13 (4): 265-269

● **Ethics of invasive techniques in neurobehavioral disease**

Kalanithi, P., Henderson, J.

WILEY-BLACKWELL.2010: 544

● **alpha-Synuclein Suppression by Targeted Small Interfering RNA in the Primate Substantia Nigra** *PLOS ONE*

McCormack, A. L., Mak, S. K., Henderson, J. M., Bumcrot, D., Farrer, M. J., Di Monte, D. A.

2010; 5 (8)

● **National Survey of Outpatient Trials for Spinal Cord Stimulation (SCS)**

Lad, S. P., Kalanithi, P. A., Boakye, M., Henderson, J. M.

LIPPINCOTT WILLIAMS & WILKINS.2010: 538

● **Socioeconomic Trends in Deep Brain Stimulation (DBS) Surgery** *NEUROMODULATION*

Lad, S. P., Kalanithi, P. S., Patil, C. G., Ithimathin, P., Batya, S., Bronte-Stewart, H., Boakye, M., Henderson, J. M.

2010; 13 (3): 182-186

● **Intra-Operative Deep Brain Stimulation of the Periaqueductal Grey Matter Modulates Blood Pressure and Heart Rate Variability in Humans** COMMENTS *NEUROMODULATION*

Foreman, R. D., Henderson, J. M.

2010; 13 (3): 181

● **Long-Term, Post-Deep Brain Stimulation Management of a Series of 36 Patients Affected With Refractory Gilles de la Tourette Syndrome** COMMENTS *NEUROMODULATION*

Henderson, J. M.

2010; 13 (3): 194

● **Long-Term Measurement of Therapeutic Electrode Impedance in Deep Brain Stimulation** COMMENTS *NEUROMODULATION*

Gildenberg, P. L., Henderson, J. M.

2010; 13 (3): 200

● **Patient Perspectives on the Efficacy and Ergonomics of Rechargeable Spinal Cord Stimulators** COMMENT *NEUROMODULATION*

Henderson, J. M.

2010; 13 (3): 223

- **Electrical stimulation of the anterior nucleus of thalamus for treatment of refractory epilepsy** *EPILEPSIA*
Fisher, R., Salanova, V., Witt, T., Worth, R., Henry, T., Gross, R., Oommen, K., Osorio, I., Nazzaro, J., Labar, D., Kaplitt, M., Sperling, M., Sandok, et al
2010; 51 (5): 899-908
- **Intracranial Neurostimulation for Pain Control: A Review** *PAIN PHYSICIAN*
Levy, R., Deer, T. R., Henderson, J.
2010; 13 (2): 157-165
- **Bilateral symmetry and coherence of subthalamic nuclei beta band activity in Parkinson's disease** *EXPERIMENTAL NEUROLOGY*
de Solages, C., Hill, B. C., Koop, M. M., Henderson, J. M., Bronte-Stewart, H.
2010; 221 (1): 260-266
- **Impact of Subthalamic Nucleus Stimulation on Young-Onset Parkinson's Disease Comments** *NEUROMODULATION*
Henderson, J. M.
2010; 13 (1): 16
- **Lead Wire Fracture Associated With Normal Therapeutic Impedance Measurements in a Patient With a Kinetra Neurostimulator Comment** *NEUROMODULATION*
Henderson, J. M.
2010; 13 (1): 67
- **Recurrent Seizures Related to Motor Cortex Stimulator Programming** *NEUROMODULATION*
Henderson, J. M., Heit, G., Fisher, R. S.
2010; 13 (1): 37-42
- **NANS Training Requirements for Spinal Cord Stimulation Devices: Selection, Implantation, and Follow-up** *NEUROMODULATION*
Henderson, J. M., Levy, R. M., Bedder, M. D., Staats, P. S., Slavin, K. V., Poree, L. R., North, R. B.
2009; 12 (3): 171-174
- **NANS Training Requirements for Spinal Cord Stimulation Devices: Selection, Implantation, and Follow-up.** *Neuromodulation : journal of the International Neuromodulation Society*
Henderson, J. M., Levy, R. M., Bedder, M. D., Staats, P. S., Slavin, K. V., Poree, L. R., North, R. B.
2009; 12 (3): 171-4
- **OPTOGENETIC NEUROMODULATION** *NEUROSURGERY*
Henderson, J. M., Federici, T., Boulis, N.
2009; 64 (5): 796-804
- **Optical Deconstruction of Parkinsonian Neural Circuitry** *SCIENCE*
Gradinaru, V., Mogri, M., Thompson, K. R., Henderson, J. M., Deisseroth, K.
2009; 324 (5925): 354-359
- **The STN beta-band profile in Parkinson's disease is stationary and shows prolonged attenuation after deep brain stimulation** *EXPERIMENTAL NEUROLOGY*
Bronte-Stewart, H., Barberini, C., Koop, M. M., Hill, B. C., Henderson, J. M., Wingeier, B.
2009; 215 (1): 20-28
- **Advanced Neurotechnologies for Chronic Neural Interfaces: New Horizons and Clinical Opportunities** *JOURNAL OF NEUROSCIENCE*
Kipke, D. R., Shain, W., Buzsaki, G., FETZ, E., Henderson, J. M., Hetke, J. F., Schalk, G.
2008; 28 (46): 11830-11838
- **Spinal cord stimulation has comparable efficacy in common pain etiologies** *NEUROMODULATION*
Krames, E. S., Oakley, J. C., Foster, A. M., Henderson, J., Prager, J. P., Rashbaum, R. R., Stamatos, J., Weiner, R. L.
2008; 11 (3): 171-181
- **Spinal cord stimulation has comparable efficacy in common pain etiologies.** *Neuromodulation : journal of the International Neuromodulation Society*
Krames, E. S., Oakley, J. C., Foster, A. M., Henderson, J., Prager, J. P., Rashbaum, R. R., Stamatos, J., Weiner, R. L.
2008; 11 (3): 171-81
- **Peripheral nerve stimulation for chronic pain** *CURRENT PAIN AND HEADACHE REPORTS*

- Henderson, J. M.
2008; 12 (1): 28-31
- **Intracranial hypotension from intrathecal baclofen pump insertion** *STEREOTACTIC AND FUNCTIONAL NEUROSURGERY*
Lad, S. P., Li, G., Lin, S., Henderson, J. M.
2008; 86 (2): 75-79
 - **Spinal cord stimulation has comparable efficacy in common pain etiologies** *Neuromodulation*
Krames ES, Oakley JC, Foster AM, Henderson JM, Prager JP, Rashbaum RR, Stamatos J, Weiner R
2008; 11: 171-181
 - **Achieving Optimal Accuracy in Frameless Functional Neurosurgical Procedures** *STEREOTACTIC AND FUNCTIONAL NEUROSURGERY*
Henderson, J. M., Holloway, K. L.
2008; 86 (5): 332-333
 - **Fluoroscopic Registration and Localization for Image-Guided Cranial Neurosurgical Procedures: A Feasibility Study** *STEREOTACTIC AND FUNCTIONAL NEUROSURGERY*
Henderson, J. M., Hill, B. C.
2008; 86 (5): 271-277
 - **A new spinal cord stimulation system effectively relieves chronic, intractable pain: A multicenter prospective clinical study** *NEUROMODULATION*
Oakley, J. C., Krames, E. S., Prager, J. P., Stamatos, J., Foster, A. M., Weiner, R., Rashbaum, R. R., Henderson, J.
2007; 10 (3): 262-278
 - **Cyberknife targeting the pterygopalatine ganglion for the treatment of chronic cluster headaches.** *Neurosurgery*
Lad, S. P., Lipani, J. D., Gibbs, I. C., Chang, S. D., Adler, J. R., Henderson, J. M.
2007; 60 (3): E580-?
 - **CyberKnife targeting the pterygopalatine ganglion for the treatment of chronic cluster headaches** *NEUROSURGERY*
Lad, S. P., Lipani, J. D., Gibbs, I. C., Chang, S. D., Adler, J. R., Henderson, J. M.
2007; 60 (3): 580-581
 - **Patient-specific analysis of the volume of tissue activated during deep brain stimulation** *NEUROIMAGE*
Butson, C. R., Cooper, S. E., Henderson, J. M., McIntyre, C. C.
2007; 34 (2): 661-670
 - **A 12-month prospective study of gasserian ganglion stimulation for trigeminal neuropathic pain** *STEREOTACTIC AND FUNCTIONAL NEUROSURGERY*
Machado, A., Ogrin, M., Rosenow, J. M., Henderson, J. M.
2007; 85 (5): 216-224
 - **Cyberknife for the treatment of refractory cluster headaches**
Lad, S. P., Lipani, J. D., Chang, S. D., Adler, J. R., Henderson, J. M.
KARGER.2007: 40
 - **Cyberknife for the treatment of refractory cluster headaches**
Lad, S. P., Lipani, J. D., Chang, S. D., Adler, J. R., Henderson, J. M.
KARGER.2007: 40
 - **Methodology for objective motor speech assessment outcome after deep brain stimulation for Parkinson's disease**
Grenier, Y., Henderson, J. M., Spielman, J. J., Ramig, L. O.
KARGER.2007: 60-61
 - **A new spinal cord stimulation system effectively relieves chronic, intractable pain: A multicenter prospective study** *Neuromodulation*
Oakley JC, Krames ES, Prager JP, Stamatos J, Foster AM, Weiner R, Rashbaum RR, Henderson JM
2007; 10: 262-278
 - **Vagal nerve stimulation versus deep brain stimulation for treatment-resistant depression: show me the data.** *Clinical neurosurgery*
Henderson, J. M.
2007; 54: 88-90

- **The clinical and research ethics of neuromodulation** *NEUROMODULATION*
Ford, P. J., Henderson, J. M.
2006; 9 (4): 250-252
- **Failure modes of spinal cord stimulation hardware** *JOURNAL OF NEUROSURGERY-SPINE*
Rosenow, J. M., Stanton-Hicks, M., Rezai, A. R., Henderson, J. M.
2006; 5 (3): 183-190
- **Deep brain stimulation decreases the risk for Parkinsonism-Hyperpyrexia Syndrome and suppresses levodopa-induced dyskinesias: A case report**
Klepitskaya, O. S., Cole, W. L., Henderson, J. M., Bronte-Stewart, H. M.
WILEY-LISS.2006: 1552
- **Prevention of mechanical failures in implanted spinal cord stimulation systems** *NEUROMODULATION*
Henderson, J. M., Schade, C. M., Sasaki, J., Caraway, D. L., Oakley, J. C.
2006; 9 (3): 183-191
- **Motor cortex stimulation and neuropathic facial pain.** *Neurosurgical focus*
Henderson, J. M., Lad, S. P.
2006; 21 (6): E6-?
- **Predicting the effects of deep brain stimulation with diffusion tensor based electric field models** *9th International Conference on Medical Image Computing and Computer-Assisted Intervention (MICCAI 2006)*
Butson, C. R., Cooper, S. E., Henderson, J. M., McIntyre, C. C.
SPRINGER-VERLAG BERLIN.2006: 429-37
- **Predicting the effects of deep brain stimulation with diffusion tensor based electric field models.** *Medical image computing and computer-assisted intervention : MICCAI ... International Conference on Medical Image Computing and Computer-Assisted Intervention*
Butson, C. R., Cooper, S. E., Henderson, J. M., McIntyre, C. C.
2006; 9: 429-437
- **Permanent neurological deficit related to magnetic resonance imaging in a patient with implanted deep brain stimulation electrodes for Parkinson's disease: case report.** *Neurosurgery*
Henderson, J. M., Tkach, J., Phillips, M., Baker, K., Shellock, F. G., Rezai, A. R.
2005; 57 (5): E1063-?
- **Is magnetic resonance imaging safe for patients with neurostimulation systems used for deep brain stimulation?** *NEUROSURGERY*
Rezai, A. R., Baker, K. B., Tkach, J. A., Phillips, M., Hrdlicka, G., Sharan, A. D., Nyenhuis, J., Ruggieri, P., Henderson, J., Shellock, F. G.
2005; 57 (5): 1056-1060
- **Frameless stereotaxy using bone fiducial markers for deep brain stimulation** *JOURNAL OF NEUROSURGERY*
Holloway, K. L., Gaede, S. E., Starr, P. A., Rosenow, J. M., Ramakrishnan, V., Henderson, J. M.
2005; 103 (3): 404-413
- **Venous air embolism during deep brain stimulation surgery in an awake supine patient** *STEREOTACTIC AND FUNCTIONAL NEUROSURGERY*
Deogaonkar, A., Avitsian, R., Henderson, J. M., Schubert, A.
2005; 83 (1): 32-35
- **A preliminary study of transient confusional states following bilateral subthalamic stimulation for Parkinson's disease** *ASSFN 2004 Conference*
Pilitsis, J. G., Rezai, A. R., Boulis, N. M., Henderson, J. M., Busch, R. M., Kubu, C. S.
KARGER.2005: 67-70
- **Neurostimulation system used for deep brain stimulation (DBS): MR safety issues and implications of failing to follow safety recommendations** *INVESTIGATIVE RADIOLOGY*
Rezai, A. R., Phillips, M., Baker, K. B., Sharan, A. D., Nyenhuis, J., Tkach, J., Henderson, J., Shellock, F. G.
2004; 39 (5): 300-303
- **Frameless localization for functional neurosurgical procedures: A preliminary accuracy study** *STEREOTACTIC AND FUNCTIONAL NEUROSURGERY*
Henderson, J. M.
2004; 82 (4): 135-141

- **The application accuracy of a skull-mounted trajectory guide system for image-guided functional neurosurgery.** *Computer aided surgery*
Henderson, J. M., Holloway, K. L., Gaede, S. E., Rosenow, J. M.
2004; 9 (4): 155-160
- **Recovery of pain control by intensive reprogramming after loss of benefit from motor cortex stimulation for neuropathic pain** *STEREOTACTIC AND FUNCTIONAL NEUROSURGERY*
Henderson, J. M., Boongird, A., Rosenow, J. M., LaPresto, E., Rezai, A. R.
2004; 82 (5-6): 207-213
- **Anatomy and physiology of chronic pain** *NEUROSURGERY CLINICS OF NORTH AMERICA*
Rosenow, J. M., Henderson, J. M.
2003; 14 (3): 445-?
- **Neuroaugmentation for chronic pain - Preface** *NEUROSURGERY CLINICS OF NORTH AMERICA*
Henderson, J. M.
2003; 14 (3): IX-X
- **The role of computer-assisted image-guided techniques** *Seminars in Neurosurgery*
Henderson JM
2001; 12: 175-181
- **An Internet-connected, patient-specific, deformable brain atlas integrated into a surgical navigation system** *14th Symposium for Computer Applications in Radiology*
Levy, A. L., SCHAEWE, T. J., Miller, M. I., Smith, K. R., HAMMOUD, A. M., Henderson, J. M., Joshi, S., Mark, K. E., Sturm, C. D., McDermont, L. L., Bucholz, R. D.
SPRINGER.1997: 231-37
- **The correction of stereotactic inaccuracy caused by brain shift using an intraoperative ultrasound device** *1st Joint Conference on Computer Vision, Virtual Reality and Robotics in Medicine / Medical Robotics and Computer-Assisted Surgery (CVRMed-MRCAS 97)*
Bucholz, R. D., Yeh, D. D., Trobaugh, J., McDermont, L. L., Sturm, C. D., Baumann, C., Henderson, J. M., Levy, A., Kessman, P.
SPRINGER-VERLAG BERLIN.1997: 459-466
- **An Internet-connected, patient-specific, deformable brain atlas integrated into a surgical navigation system**
Bucholz, R. D., Hammoud, A. M., Joshi, S., Mark, K. E., Miller, M. I., Smith, K. R., Levy, A. L., Lemke, H. U., Vannier, M. W., Inamura, K.
ELSEVIER SCIENCE BV.1997: 1040
- **Anatomical surface contour matching for efficient registration in image guided neurosurgery** *11th International Symposium and Exhibition on Computer Assisted Radiology and Surgery (CAR 97) / 1st Annual Conference of ISCAS*
Bucholz, R., Macneil, W. R., Henderson, J.
ELSEVIER SCIENCE BV.1997: 772-777
- **Epidural hematoma producing Brown-Sequard syndrome: A case due to ruptured hemangioma with magnetic resonance imaging findings (vol 6, pg 62, 1996)** *JOURNAL OF NEUROIMAGING*
Ehsan, T., Henderson, J. M., Manepalli, A. N.
1996; 6 (2): 135
- **Epidural hematoma producing brown-sequard syndrome: A case due to ruptured hemangioma with magnetic resonance imaging findings** *JOURNAL OF NEUROIMAGING*
Ehsan, T., Henderson, J. M., Manepalli, A. N.
1996; 6 (1): 62-63
- **Combined stereotactic thalamotomy and posteroverentral pallidotomy for Parkinson's disease.** *Journal of image guided surgery*
Iacono, R. P., Henderson, J. M., Lonser, R. R.
1995; 1 (3): 133-140
- **AN ACCURATE AND ERGONOMIC METHOD OF REGISTRATION FOR IMAGE-GUIDED NEUROSURGERY** *COMPUTERIZED MEDICAL IMAGING AND GRAPHICS*
Henderson, J. M., Smith, K. R., Bucholz, R. D.
1994; 18 (4): 273-277

- **ACCURATE AND ERGONOMIC METHOD OF REGISTRATION FOR IMAGE-GUIDED NEUROSURGERY** *Conference on Clinical Applications of Modern Imaging Technology II*
Henderson, J. M., Bucholz, R. D.
SPIE - INT SOC OPTICAL ENGINEERING.1994: 67-77
- **INTRAOPERATIVE LOCALIZATION USING A 3-DIMENSIONAL OPTICAL DIGITIZER** *Conference on Clinical Applications of Modern Imaging Technology*
Bucholz, R. D., Smith, K. R., Henderson, J., MCDURMONT, L., Schulz, D.
SPIE - INT SOC OPTICAL ENGINEERING.1993: 312-322
- **CHRONIC ACCESS TO ENDONEURIAL SPACE USING AN ARTERIAL AUTOGRAPH** *JOURNAL OF NEUROSCIENCE METHODS*
Kroin, J. S., Henderson, J. M., Weinrib, H., Penn, R. D., Kerns, J. M.
1989; 27 (2): 133-142