Stanford



Jaimie Henderson, MD

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

CLINICAL OFFICE (PRIMARY)

- **Stanford Neuroscience Health Center**

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ACADEMIC CONTACT INFORMATION

- **Administrative Contact**

  Kathy Tsou

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Bio

CLINICAL FOCUS

- Functional Neurosurgery
- Movement Disorders
- Neurological Surgery
- Deep Brain Stimulation
- Neuromodulation
- High Intensity Focused Ultrasound Therapy

ACADEMIC APPOINTMENTS

- Professor-Univ Med Line, Neurosurgery
- Professor-Univ Med Line (By courtesy), Neurology and Neurological Sciences
- 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

- Medical Education: Rush University Medical College (1988) IL
- Residency: Saint Louis University School of Medicine (1995) MO
- Fellowship: Loma Linda University Neurosurgery Training Programs (1995) CA
- Internship: Rush University Medical Center General Surgery Residency (1989) 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
- Coordinated Reset Spinal Cord Stimulation, Not Specified

Teaching

STANFORD ADVISEES

Postdoctoral Faculty Sponsor

Erin Kunz, Sasi Madugula, Alessandro Marin Vargas, Yizi Zhang

Doctoral Dissertation Co-Advisor (NonAC)

Alexander Atalay, Alisa Levin, Ryan Wang

Doctoral Dissertation Reader (NonAC)

Deniz Bingul

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Neurosciences (PhD Program)

Publications

PUBLICATIONS

- **A mosaic of whole-body representations on the human precentral gyrus.** *Nature*
  Deo, D. R., Okorokova, E. V., Pritchard, A. L., Hahn, N. V., Card, N. S., Nason-Tomaszewski, S. R., Jude, J., Hosman, T., Choi, E. Y., Qiu, D., Meng, Y., Wairagkar, M., Nicolas, et al
  2026
- **Inner speech in motor cortex and implications for speech neuroprostheses.** *Cell*
  Kunz, E. M., Abramovich Krasa, B., Kamdar, F., Avansino, D. T., Hahn, N., Yoon, S., Singh, A., Nason-Tomaszewski, S. R., Card, N. S., Jude, J. J., Jacques, B. G., Bechefsky, P. H., Iacobacci, et al
  2025
- **A high-performance brain-computer interface for finger decoding and quadcopter game control in an individual with paralysis.** *Nature medicine*
  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.
  2025
- **An Accurate and Rapidly Calibrating Speech Neuroprosthesis.** *The New England journal of medicine*

Card, N. S., Wairagkar, M., Iacobacci, C., Hou, X., Singer-Clark, T., Willett, F. R., Kunz, E. M., Fan, C., Vahdati Nia, M., Deo, D. R., Srinivasan, A., Choi, E. Y., Glasser, et al

2024; 391 (7): 609-618

- **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

- **Alleviation of Symptom Burden Following Deep Brain Stimulation in Moderate to Severe Brain Injury.** *Neurotrauma reports*

  Gerber, L. M., Temkin, N. R., Chua, J., Barber, J., Victor, J. D., Henderson, J. M., Giacino, J. T., Schiff, N. D.

  2026; 7: 2689288X261484906

- **Preparatory encoding of intended movement in the human motor cortex and implications for brain-computer interfaces.** *Current biology : CB*

  Rigotti-Thompson, M., Nason-Tomaszewski, S. R., Bechefsky, P. H., Acosta, A., Hahn, N. V., Avansino, D. T., Richards, B. A., Nicolas, C., Ali, Y. H., Henderson, J. M., Hochberg, L. R., AuYong, N., Pandarinath, et al

  2026

- **Using Multinodal Deep Brain Stimulation for Treatment of Complex Movement Disorders: Initial Case Series.** *Operative neurosurgery (Hagerstown, Md.)*

  Sherman, B. C., Ahmed, M. A., Lev-Tov, L., Purger, D. A., Reid, B., Hornbeck, T., Verhein, J. R., Halpern, C. H., Katz, M., Henderson, J. M., Ferris, M., Buch, V. P.

  2026; 31 (2): 241-251

- **Improved autobiographical memory with central thalamic deep brain stimulation in traumatic brain injury.** *Brain communications*

  Choi, E. Y., Levine, B., Victor, J. D., Gerber, L. M., Henderson, J. M., Schiff, N. D.

  2026; 8 (3): fcag174

- **Premotor cortex uses a compositional neural geometry to plan words.** *bioRxiv : the preprint server for biology*

  Krasa, B. A., Kunz, E. M., Kamdar, F., Avansino, D., Hahn, N., Singh, A., Card, N. S., Wairagkar, M., Iacobacci, C., Hochberg, L. R., Brandman, D. M., Stavisky, S. D., Henderson, et al

  2026

- **Improved autobiographical memory with central thalamic deep brain stimulation in traumatic brain injury** *Brain Communications*

  Choi, E. Y., Levine, B., Victor, J. D., Gerber, L. M., Henderson, J. M., Schiff, N. D.

  2026; 8 (3)

- **Alleviation of Symptom Burden Following Deep Brain Stimulation in Moderate to Severe Brain Injury** *NEUROTRAUMA REPORTS*

  Gerber, L. M., Temkin, N. R., Chua, J., Barber, J., Victor, J. D., Henderson, J. M., Giacino, J. T., Schiff, N. D.

  2026; 7

- **Long-term unsupervised recalibration of cursor-based intracortical brain-computer interfaces using a hidden Markov model.** *Nature biomedical engineering*

Wilson, G. H., Stein, E. A., Kamdar, F., Avansino, D. T., Pun, T. K., Gross, R., Hosman, T., Singer-Clark, T., Kapitonava, A., Hochberg, L. R., Simeral, J. D., Shenoy, K. V., Druckmann, et al

2025

- **Seizure outcomes of laser interstitial thermal therapy (LITT) for drug-resistant extratemporal epilepsy.** *Epileptic disorders : international epilepsy journal with videotape*

  Touponse, G. C., Wang, A. R., Buch, V. P., Purger, D. A., Halpern, C. H., Henderson, J. M., Falco-Walter, J., Le, S.

  2025

- **Improved interpretability in LFADS models using a learned, context-dependent per-trial bias.** *bioRxiv : the preprint server for biology*

  Shah, N. P., Krasa, B. A., Kunz, E., Hahn, N., Kamdar, F., Avansino, D., Hochberg, L. R., Henderson, J. M., Sussillo, D.

  2025

- **Gesture encoding in human left precentral gyrus neuronal ensembles.** *Communications biology*

  Vargas-Irwin, C. E., Hosman, T., Gusman, J. T., Pun, T. K., Simeral, J. D., Singer-Clark, T., Kapitonava, A., Nicolas, C., Shah, N. P., Avansino, D. T., Kamdar, F., Williams, Z. M., Henderson, et al

  2025; 8 (1): 1315

- **Error encoding in human speech motor cortex.** *bioRxiv : the preprint server for biology*

  Hou, X., Iacobacci, C., Card, N. S., Wairagkar, M., Singer-Clark, T., Kunz, E. M., Fan, C., Kamdar, F., Hahn, N., Hochberg, L. R., Henderson, J. M., Willett, F. R., Brandman, et al

  2025

- **Pseudo-linear summation explains neural geometry of multi-finger movements in human premotor cortex.** *Nature communications*

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

  2025; 16 (1): 5008

- **Conserved brain-wide emergence of emotional response from sensory experience in humans and mice.** *Science (New York, N.Y.)*

  Kauvar, I., Richman, E. B., Liu, T. X., Li, C., Vesuna, S., Chibukhchyan, A., Yamada, L., Fogarty, A., Solomon, E., Choi, E. Y., Mortazavi, L., Chau Loo Kung, G., Mukunda, et al

  2025; 388 (6750): eadt3971

- **Multi-gesture drag-and-drop decoding in a 2D iBCI control task.** *Journal of neural engineering*

  Gusman, J. T., Hosman, T., Crawford, R., Singer-Clark, T., Kapitonava, A., Kelemen, J., Hahn, N., Henderson, J. M., Hochberg, L., Simeral, J., Vargas-Irwin, C.

  2025

- **"Quality over quantity:" smaller, targeted lesions optimize quality of life outcomes after MR-guided focused ultrasound thalamotomy for essential tremor.** *Frontiers in neurology*

  Buch, V. P., Purger, D., Datta, A., Wang, A., Barbosa, D., Chodakiewitz, Y., Lev-Tov, L., Li, C., Halpern, C., Henderson, J., McNab, J. A., Bitton, R. R., Ghanouni, et al

  2024; 15: 1450699

- **Measuring instability in chronic human intracortical neural recordings towards stable, long-term brain-computer interfaces.** *Communications biology*

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

  2024; 7 (1): 1363

- **A flexible intracortical brain-computer interface for typing using finger movements.** *bioRxiv : the preprint server for biology*

  Shah, N. P., Willsey, M. S., Hahn, N., Kamdar, F., Avansino, D. T., Fan, C., Hochberg, L. R., Willett, F. R., Henderson, J. M.

  2024

- **An accurate and rapidly calibrating speech neuroprosthesis.** *medRxiv : the preprint server for health sciences*

  Card, N. S., Wairagkar, M., Iacobacci, C., Hou, X., Singer-Clark, T., Willett, F. R., Kunz, E. M., Fan, C., Nia, M. V., Deo, D. R., Srinivasan, A., Choi, E. Y., Glasser, et al

  2024

- **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., Simeral, 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
- **An individualized tractography pipeline for the nucleus basalis of Meynert lateral tract.** *Imaging neuroscience (Cambridge, Mass.)*
  Crockett, R. A., Wilkins, K. B., Zeineh, M. M., McNab, J. A., Henderson, J. M., Buch, V. P., Brontë-Stewart, H. M.
  2024; 2
- **Towards a Quantitative Analysis of Coarticulation with a Phoneme-to-Articulatory Model**
  Fan, C., Henderson, J. M., Manning, C., Willett, F. R., Int Speech Commun Assoc
  ISCA-INT SPEECH COMMUNICATION ASSOC.2024: 3095-3099
- **Few-shot Algorithms for Consistent Neural Decoding (FALCON) Benchmark**
  Karpowicz, B. M., Ye, J., Fan, C., Tostado-Marcos, P., Rizzoglio, F., Washington, C., Scodeler, T., de Lucena, D., Nason-Tomaszewski, S. R., Mender, M. J., Ma, X., Arneodo, E., Hochberg, et al
  edited by Globerson, A., Mackey, L., Belgrave, D., Fan, A., Paquet, U., Tomczak, J., Zhang, C.
  NEURAL INFORMATION PROCESSING SYSTEMS (NIPS).2024
- **An individualized tractography pipeline for the nucleus basalis of Meynert lateral tract** *Imaging Neuroscience*
  Crockett, R. A., Wilkins, K. B., Zeineh, M. M., McNab, J. A., Henderson, J. M., Buch, V. P., Brontë-Stewart, H. M.
  2024: 1–13.
- **Plug-and-Play Stability for Intracortical Brain-Computer Interfaces: A One-Year Demonstration of Seamless Brain-to-Text Communication.** *Advances in neural information processing systems*
  Fan, C., Hahn, N., Kamdar, F., Avansino, D., Wilson, G. H., Hochberg, L., Shenoy, K. V., Henderson, J. M., Willett, F. R.
  2023; 36: 42258-42270
- **Stimulation of the thalamus for arousal restoral 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
- **Plug-and-Play Stability for Intracortical Brain-Computer Interfaces: A One-Year Demonstration of Seamless Brain-to-Text Communication**
  Fan, C., Hahn, N., Kamdar, F., Avansino, D., Wilson, G. H., Hochberg, L., Shenoy, K. V., Henderson, J. M., Willett, F. R.
  edited by Oh, A., Neumann, T., Globerson, A., Saenko, K., Hardt, M., Levine, S.
  NEURAL INFORMATION PROCESSING SYSTEMS (NIPS).2023
- **A brain-computer typing interface using finger movements**
  Shah, N. P., Willsey, M. S., Hahn, N., Kamdar, F., Avansino, D. T., Hochberg, L. R., Shenoy, K. V., Henderson, J. M., IEEE
  IEEE.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
- **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
- **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
- **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
- **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 Staalduinen, 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., Tourdias, T. n., Saranathan, M. n., Halpern, C. H., Henderson, J. M., Pauly, K. B., Ghanouni, P. n., Rutt, B. K.
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
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