

Stanford



Kenneth Weber

Sr Res Scientist-Basic Life, Anesthesia - Adult Pain (Designated)

Bio

BIO

Dr. Weber's research seeks to develop markers of pain and sensorimotor function using machine-learning and advanced brain, spinal cord, and musculoskeletal magnetic resonance imaging. Dr. Weber aims to use these techniques to better understand the neuropathology of pain and neurological conditions and discover more effective treatments and preventative strategies.

HONORS AND AWARDS

- Dermatomal Mapping with Spinal Cord Functional Magnetic Resonance Imaging (R01NS133305), National Institute of Neurological Disorders and Stroke (2023-2028)
- Neuromuscular Signatures to Predict Surgical Response in Cervical Myelopathy (R01NS128478), National Institute of Neurological Disorders and Stroke (2023-2028)
- NIH Clinical Research Extramural Loan Repayment Program Award (L30NS108301), National Institute of Neurological Disorders and Stroke (2022 - 2024)
- George B. McClelland Researcher of the Year Award, American Chiropractic Association (2021)
- Mentored Patient-Oriented Research Career Development Award (K23NS104211), National Institute of Neurological Disorders and Stroke (2018 - 2023)
- NIH Clinical Research Extramural Loan Repayment Program Award (L30NS108301), National Institute of Neurological Disorders and Stroke (2020 - 2022)
- MRI and Machine Learning to Improve Early Prognosis and Clinical Management after SCI (R03HD094577), Eunice Kennedy Shriver National Institute of Child Health and Human Development (2019 - 2021)
- NIH Clinical Research Extramural Loan Repayment Program Award (L30NS108301), National Institute of Neurological Disorders and Stroke (2018 - 2020)
- Ruth L. Kirschstein National Research Service Award Individual Fellowship (F32AT007800), National Center for Complementary and Integrative Health (2012 - 2015)

EDUCATION AND CERTIFICATIONS

- Postdoctoral Fellowship, Stanford University , Clinical Pain Research (2018)
- PhD, Northwestern University , Neuroscience (2016)
- DC, Palmer College of Chiropractic , Chiropractic (2009)
- BS, Saginaw Valley State University , Biology (2006)

PROJECTS

- Neuroimaging-Based Brain and Spinal Cord Biomarkers for Cervical Radiculopathy

LINKS

- Curriculum Vitae: <https://stanfordmedicine.box.com/s/5c2r2p5tyd1y21n9pfavo436x1b5559f>
- ResearchGate: https://www.researchgate.net/profile/Kenneth_Weber3?ev=hdr_xprf&_sg=WBSdkzqg2tU3b8aRV6taxZ0vzzYYvjBlifgFZPcehhqGU4pbZTTRkXkrrU2IZG

- Google Scholar: <https://scholar.google.com/citations?hl=en&user=oaG0LekAAAAJ>
- Twitter: <https://twitter.com/DrKenWeber>
- LinkedIn: https://www.linkedin.com/in/kennethaweberiiidc?trk=nav_responsive_tab_profile_pic
- GitHub: <https://github.com/kennethaweberii/>
- sourceforge: <https://sourceforge.net/u/kennethaweberii/profile/>
- Lab Website: <http://med.stanford.edu/pain/snapl.html>
- Lab Twitter: <https://twitter.com/STANFORDPAIN>
- Lab Facebook: <https://www.facebook.com/stanfordpainmedicine/>
- Lab YouTube: <https://www.youtube.com/user/stanfordpainmedicine>

Professional

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

- Staff Chiropractor, Palo Alto Veterans Affairs Health Care System (2024 - present)
- Co-Section Editor — Psychology, Psychiatry & Brain Neuroscience, Pain Medicine (2022 - present)
- Associate Editor, Pain Medicine (2020 - 2022)
- Fellow, Chiropractic Academy for Research Leadership (2020 - present)
- Ambassador, NIH Loan Repayment Program (2019 - present)

Publications

PUBLICATIONS

- **Investigating the Associations between Lumbar Paraspinal Muscle Health and Age, BMI, Sex, Physical Activity and Back Pain using an Automated Computer-Vision Model: A UK Biobank Study.** *The spine journal : official journal of the North American Spine Society*
Wesselink, E. O., Pool-Goudzwaard, A., De Leener, B., Law, C., Fenyo, M. B., Ello, G. M., Coppieters, M. W., Elliott, J. M., Mackey, S., Weber, K. A.
2024
- **A single dermatome clinical prediction rule for independent walking one year after spinal cord injury.** *Archives of physical medicine and rehabilitation*
Smith, A. C., Draganich, C., Thornton, W. A., Berliner, J. C., Lennarson, P. J., Rejc, E., Sevigny, M., Charlifue, S., Tefertiller, C., Weber, K. A.
2023
- **Lateral corticospinal tract and dorsal column damage: predictive relationships with motor and sensory scores at discharge from acute rehabilitation after spinal cord injury.** *Archives of physical medicine and rehabilitation*
Smith, A. C., O'Dell, D. R., Albin, S. R., Berliner, J. C., Dungan, D., Robinson, E., Elliott, J. M., Carballido-Gamio, J., Stevens-Lapsley, J., Weber, K. A.
2021
- **Assessing the Spatial Distribution of Cervical Spinal Cord Activity during Tactile Stimulation of the Upper Extremity in Humans with Functional Magnetic Resonance Imaging.** *NeuroImage*
Weber, K. A., Chen, Y., Paliwal, M., Law, C. S., Hopkins, B. S., Mackey, S., Dhafer, Y., Parrish, T. B., Smith, Z. A.
2020: 116905
- **Lateralization of cervical spinal cord activity during an isometric upper extremity motor task with functional magnetic resonance imaging.** *NeuroImage*
Weber, K. A., Chen, Y., Wang, X., Kahnt, T., Parrish, T. B.
2016; 125: 233-243
- **Response to Letter to the Editor on "A single dermatome clinical prediction rule for independent walking one year after spinal cord injury."** *Archives of physical medicine and rehabilitation*
Smith, A. C., Draganich, C., Thornton, W. A., Berliner, J. C., Lennarson, P. J., Rejc, E., Sevigny, M., Charlifue, S., Tefertiller, C., Weber, K. A.
2024
- **Peak Slope Ratio of the Recruitment Curves Compared to Muscle Evoked Potentials to Optimize Standing Configurations with Percutaneous Epidural Stimulation after Spinal Cord Injury** *JOURNAL OF CLINICAL MEDICINE*

- Alazzam, A. M., Ballance, W. B., Smith, A. C., Rejc, E., Weber, K. A., Trainer, R., Gorgey, A. S.
2024; 13 (5)
- **Quantifying lumbar paraspinal intramuscular fat: Accuracy and reliability of automated thresholding models.** *North American Spine Society journal*
Wesselink, E. O., Elliott, J. M., Pool-Goudzwaard, A., Coppieters, M. W., Pevenage, P. P., Di Ieva, A., Weber Ii, K. A.
2024; 17: 100313
 - **Recent developments and future avenues for human corticospinal neuroimaging.** *Frontiers in human neuroscience*
Kaptan, M., Pfyffer, D., Konstantopoulos, C. G., Law, C. S., Weber Ii, K. A., Glover, G. H., Mackey, S.
2024; 18: 1339881
 - **The association between lateral hip muscle size/intramuscular fat infiltration and hip strength in active young adults with long standing hip/groin pain.** *Physical therapy in sport : official journal of the Association of Chartered Physiotherapists in Sports Medicine*
Perraton, Z., Mosler, A. B., Lawrenson, P. R., Weber Ii, K., Elliott, J. M., Wesselink, E. O., Crossley, K. M., Kemp, J. L., Stewart, C., Girdwood, M., King, M. G., Heerey, J. J., Scholes, et al
2023; 65: 95-101
 - **Evaluating tissue injury in cervical spondylotic myelopathy with spinal cord MRI: a systematic review.** *European spine journal : official publication of the European Spine Society, the European Spinal Deformity Society, and the European Section of the Cervical Spine Research Society*
Khan, A. F., Mohammadi, E., Haynes, G., Hameed, S., Rohan, M., Anderson, D. B., Weber, K. A., Muhammad, F., Smith, Z. A.
2023
 - **Isolating Neurologic Deficits in Cervical Spondylotic Myelopathy: A Case-Controlled Study, Using the NIH Toolbox Motor Battery.** *Neurology. Clinical practice*
Muhammad, F., Baha, A., Haynes, G., Shakir, H., Omini, M., Martin, M., Weber, K. A., Paliwal, M., Van Hal, M., Dickson, D., Dhaher, Y., Zhao, Y. D., Smith, et al
2023; 13 (2): e200126
 - **The Problem of Pain in the United States: A Population-Based Characterization of Biopsychosocial Correlates of High Impact Chronic Pain using the National Health Interview Survey.** *The journal of pain*
Falasinnu, T., Hossain, M. B., Weber, K. A., Helmick, C. G., Karim, M. E., Mackey, S.
2023
 - **Biopsychosocial Sequelae and Recovery Trajectories From Whiplash Injury Following a Motor Vehicle Collision.** *The spine journal : official journal of the North American Spine Society*
Elliott, J. M., Walton, D. M., Albin, S. R., Courtney, D. M., Siegmund, G. P., Carroll, L. J., Weber, K. A., Smith, A. C.
2023
 - **Predicting Outdoor Walking 1 Year After Spinal Cord Injury: A Retrospective, Multisite External Validation Study.** *Journal of neurologic physical therapy : JNPT*
Draganich, C., Weber, K. A., Thornton, W. A., Berliner, J. C., Sevigny, M., Charlifue, S., Tefertiller, C., Smith, A. C.
2023
 - **Confounds in neuroimaging: A clear case of sex as a confound in brain-based prediction.** *Frontiers in neurology*
Weber, K. A., Teplin, Z. M., Wager, T. D., Law, C. S., Prabhakar, N. K., Ashar, Y. K., Gilam, G., Banerjee, S., Delp, S. L., Glover, G. H., Hastie, T. J., Mackey, S.
2022; 13: 960760
 - **Is fatty infiltration in paraspinal muscles reversible with exercise in people with low back pain? A systematic review.** *European spine journal : official publication of the European Spine Society, the European Spinal Deformity Society, and the European Section of the Cervical Spine Research Society*
Wesselink, E. O., Pool, J. J., Mollema, J., Weber, K. A., Elliott, J. M., Coppieters, M. W., Pool-Goudzwaard, A. L.
2022
 - **Greater muscle volume and muscle fat infiltrate in the deep cervical spine extensor muscles (multifidus with semispinalis cervicis) in individuals with chronic idiopathic neck pain compared to age and sex-matched asymptomatic controls: a cross-sectional study.** *BMC musculoskeletal disorders*
Snodgrass, S. J., Stanwell, P., Weber, K. A., Shepherd, S., Kennedy, O., Thompson, H. J., Elliott, J. M.
2022; 23 (1): 973
 - **Effects of variability in manually contoured spinal cord masks on fMRI co-registration and interpretation.** *Frontiers in neurology*
Hoggarth, M. A., Wang, M. C., Hemmerling, K. J., Vigotsky, A. D., Smith, Z. A., Parrish, T. B., Weber, K. A., Bright, M. G.
2022; 13: 907581

- **Editorial: Mechanisms and models of musculoskeletal pain and nonpharmacological treatment.** *Frontiers in integrative neuroscience*
Reed, W. R., Weber, K. A., Martins, D. F.
2022; 16: 998413
- **Convolutional neural networks for the automatic segmentation of lumbar paraspinal muscles in people with low back pain.** *Scientific reports*
Wesselink, E. O., Elliott, J. M., Coppieters, M. W., Hancock, M. J., Cronin, B., Pool-Goudzwaard, A., Weber, K. A.
2022; 12 (1): 13485
- **Towards defining muscular regions of interest from axial magnetic resonance imaging with anatomical cross-reference: a scoping review of lateral hip musculature.** *BMC musculoskeletal disorders*
Perraton, Z., Lawrenson, P., Mosler, A. B., Elliott, J. M., Weber, K. A., Flack, N. A., Cornwall, J., Crawford, R. J., Stewart, C., Semciw, A. I.
2022; 23 (1): 533
- **Improving the measurement of intrinsic foot muscle morphology and composition from high-field (7T) magnetic resonance imaging.** *Journal of biomechanics*
Franetovich Smith, M. M., Mendis, M. D., Weber, K. A., Elliott, J. M., Ho, R., Wilkes, M. J., Collins, N. J.
2022; 140: 111164
- **Preventive Supplementation of Omega-3 Reduces Pain and Pro-inflammatory Cytokines in a Mouse Model of Complex Regional Pain Syndrome Type I.** *Frontiers in integrative neuroscience*
de Oliveira Galassi, T., Fernandes, P. F., Salgado, A. S., Cidral-Filho, F. J., Piovezan, A. P., Lüdtke, D. D., Mack, J. M., Weber, K. A., Reed, W. R., Bobinski, F., Martins, D. F.
2022; 16: 840249
- **Differences in Structural Brain Characteristics Between Individuals with Chronic Nonspecific Neck Pain and Asymptomatic Controls: A Case-Control Study.** *Journal of pain research*
de Zoete, R. M., Stanwell, P., Weber, K. A., Snodgrass, S. J.
2022; 15: 521-531
- **Utilization of Mid-Thigh Magnetic Resonance Imaging to Predict Lean Body Mass and Knee Extensor Strength in Obese Adults.** *Frontiers in rehabilitation sciences*
Bodkin, S. G., Smith, A. C., Bergman, B. C., Huo, D., Weber, K. A., Zarini, S., Kahn, D., Garfield, A., Macias, E., Harris-Love, M. O.
2022; 3
- **Spinal Cord Tissue Bridges Validation Study: Predictive Relationships With Sensory Scores Following Cervical Spinal Cord Injury.** *Topics in spinal cord injury rehabilitation*
Smith, A. C., O'Dell, D. R., Thornton, W. A., Dungan, D., Robinson, E., Thaker, A., Gisbert, R., Weber, K. A., Berliner, J. C., Albin, S. R.
2022; 28 (2): 111-115
- **Response to Lawrence DJ: the global summit on the efficacy and effectiveness of spinal manipulative therapy for the prevention and treatment of non-musculoskeletal disorders: a systematic review of the literature.** *Chiropractic & manual therapies*
Cote, P., Hartvigsen, J., Axen, I., Leboeuf-Yde, C., Corso, M., Shearer, H., Wong, J., Marchand, A., Cassidy, J. D., French, S., Kawchuk, G. N., Mior, S., Poulsen, et al
2021; 29 (1): 26
- **Classifying chronic pain using multidimensional pain-agnostic symptom assessments and clustering analysis.** *Science advances*
Gilam, G., Cramer, E. M., Webber, K. A., Ziadni, M. S., Kao, M. C., Mackey, S. C.
2021; 7 (37): eabj0320
- **Fatty infiltration in cervical flexors and extensors in patients with degenerative cervical myelopathy using a multi-muscle segmentation model.** *PloS one*
Paliwal, M., Weber, K. A., Smith, A. C., Elliott, J. M., Muhammad, F., Dahdaleh, N. S., Bodurka, J., Dhaher, Y., Parrish, T. B., Mackey, S., Smith, Z. A.
2021; 16 (6): e0253863
- **Spinal cord imaging markers and recovery of standing with epidural stimulation in individuals with clinically motor complete spinal cord injury.** *Experimental brain research*
Smith, A. C., Angeli, C. A., Ugiliweneza, B., Weber, K. A., Bert, R. J., Negahdar, M., Mesbah, S., Boakye, M., Harkema, S. J., Rejc, E.
2021
- **Generic acquisition protocol for quantitative MRI of the spinal cord.** *Nature protocols*
Cohen-Adad, J., Alonso-Ortiz, E., Abramovic, M., Arneitz, C., Atcheson, N., Barlow, L., Barry, R. L., Barth, M., Battiston, M., Büchel, C., Budde, M., Callot, V., Combes, et al

2021

- **Open-access quantitative MRI data of the spinal cord and reproducibility across participants, sites and manufacturers.** *Scientific data*
Cohen-Adad, J., Alonso-Ortiz, E., Abramovic, M., Arneitz, C., Atcheson, N., Barlow, L., Barry, R. L., Barth, M., Battiston, M., Büchel, C., Budde, M., Callot, V., Combes, et al
2021; 8 (1): 219
- **Multi-muscle deep learning segmentation to automate the quantification of muscle fat infiltration in cervical spine conditions.** *Scientific reports*
Weber, K. A., Abbott, R., Bojilov, V., Smith, A. C., Wasielewski, M., Hastie, T. J., Parrish, T. B., Mackey, S., Elliott, J. M.
2021; 11 (1): 16567
- **Spinal Cord Resting State Activity in Individuals With Fibromyalgia Who Take Opioids.** *Frontiers in neurology*
Martucci, K. T., Weber, K. A., Mackey, S. C.
2021; 12: 694271
- **The influence of conventional T2 MRI indices in predicting who will walk outside one year after spinal cord injury.** *The journal of spinal cord medicine*
Berliner, J. C., O'Dell, D. R., Albin, S. R., Dungan, D. n., Sevigny, M. n., Elliott, J. M., Weber, K. A., Abdie, D. R., Anderson, J. S., Rich, A. A., Seib, C. A., Sagan, H. G., Smith, et al
2021: 1–7
- **The global summit on the efficacy and effectiveness of spinal manipulative therapy for the prevention and treatment of non-musculoskeletal disorders: a systematic review of the literature.** *Chiropractic & manual therapies*
Côté, P. n., Hartvigsen, J. n., Axén, I. n., Leboeuf-Yde, C. n., Corso, M. n., Shearer, H. n., Wong, J. n., Marchand, A. A., Cassidy, J. D., French, S. n., Kawchuk, G. N., Mior, S. n., Poulsen, et al
2021; 29 (1): 8
- **New insights into intrinsic foot muscle morphology and composition using ultra-high-field (7-Tesla) magnetic resonance imaging.** *BMC musculoskeletal disorders*
Franetovich Smith, M. M., Elliott, J. M., Al-Najjar, A. n., Weber, K. A., Hoggarth, M. A., Vicenzino, B. n., Hodges, P. W., Collins, N. J.
2021; 22 (1): 97
- **Spinal manipulation and modulation of pain sensitivity in persistent low back pain: a secondary cluster analysis of a randomized trial.** *Chiropractic & manual therapies*
Nim, C. G., Weber, K. A., Kawchuk, G. N., O'Neill, S. n.
2021; 29 (1): 10
- **Misinformation, chiropractic, and the COVID-19 pandemic.** *Chiropractic & manual therapies*
Axen, I., Bergstrom, C., Bronson, M., Cote, P., Nim, C. G., Goncalves, G., Hebert, J. J., Hertel, J. A., Innes, S., Larsen, O. K., Meyer, A., O'Neill, S., Perle, et al
2020; 28 (1): 65
- **Axial MRI biomarkers of spinal cord damage to predict future walking and motor function: a retrospective study.** *Spinal cord*
Smith, A. C., Albin, S. R., O'Dell, D. R., Berliner, J. C., Dungan, D., Sevigny, M., Draganich, C., Elliott, J. M., Weber, K. A.
2020
- **Association of State Policies Allowing Medical Cannabis for Opioid Use Disorder With Dispensary Marketing for This Indication.** *JAMA network open*
Shover, C. L., Vest, N. A., Chen, D., Stueber, A., Falasinnu, T. O., Hah, J. M., Kim, J., Mackey, I., Weber, K. A., Ziadni, M., Humphreys, K.
2020; 3 (7): e2010001
- **Midsagittal tissue bridges are associated with walking ability in incomplete spinal cord injury: A magnetic resonance imaging case series** *JOURNAL OF SPINAL CORD MEDICINE*
O'Dell, D. R., Weber, K. A., Berliner, J. C., Elliott, J. M., Connor, J. R., Cummins, D. P., Heller, K. A., Hubert, J. S., Kates, M. J., Mendoza, K. R., Smith, A. C.
2020; 43 (2): 268–71
- **Muscle fat infiltration following whiplash: A computed tomography and magnetic resonance imaging comparison.** *PloS one*
Elliott, J. M., Smith, A. C., Hoggarth, M. A., Albin, S. R., Weber, K. A., Haager, M. n., Fundaun, J. n., Wasielewski, M. n., Courtney, D. M., Parrish, T. B.
2020; 15 (6): e0234061
- **Macromolecular changes in spinal cord white matter characterize whiplash outcome at 1-year post motor vehicle collision.** *Scientific reports*
Hoggarth, M. A., Elliott, J. M., Smith, Z. A., Paliwal, M. n., Kwasny, M. J., Wasielewski, M. n., Weber, K. A., Parrish, T. B.
2020; 10 (1): 22221

- **Foot exercise plus education versus wait and see for the treatment of plantar heel pain (FEET trial): a protocol for a feasibility study.** *Journal of foot and ankle research*
Franetovich Smith, M. M., Collins, N. J., Mellor, R. n., Grimaldi, A. n., Elliott, J. n., Hoggarth, M. n., Weber Ii, K. A., Vicenzino, B. n.
2020; 13 (1): 20
- **Spinal Cord Imaging Markers and Recovery of Volitional Leg Movement With Spinal Cord Epidural Stimulation in Individuals With Clinically Motor Complete Spinal Cord Injury.** *Frontiers in systems neuroscience*
Rejc, E. n., Smith, A. C., Weber, K. A., Ugiliweneza, B. n., Bert, R. J., Negahdar, M. n., Boakye, M. n., Harkema, S. J., Angeli, C. A.
2020; 14: 559313
- **Magnetization Transfer Ratio and Morphometrics Of the Spinal Cord Associates with Surgical Recovery in Patients with Degenerative Cervical Myelopathy.** *World neurosurgery*
Paliwal, M. n., Weber, K. A., Hopkins, B. S., Cantrell, D. R., Hoggarth, M. A., Elliott, J. M., Dahdaleh, N. S., Mackey, S. n., Parrish, T. D., Dhaheer, Y. n., Smith, Z. A.
2020
- **Machine Learning for the Prediction of Cervical Spondylotic Myelopathy: A Post Hoc Pilot Study of 28 Participants** *WORLD NEUROSURGERY*
Hopkins, B. S., Weber, K. A., Kesavabhotla, K., Paliwal, M., Cantrell, D. R., Smith, Z. A.
2019; 127: E436–E442
- **Dynamic per slice shimming for simultaneous brain and spinal cord fMRI** *MAGNETIC RESONANCE IN MEDICINE*
Islam, H., Law, C. W., Weber, K. A., Mackey, S. C., Glover, G. H.
2019; 81 (2): 825–38
- **Evidence for decreased Neurologic Pain Signature activation following thoracic spinal manipulation in healthy volunteers and participants with neck pain.** *NeuroImage. Clinical*
Weber Ii, K. A., Wager, T. D., Mackey, S. n., Elliott, J. M., Liu, W. C., Sparks, C. L.
2019; 24: 102042
- **MRI atlas-based volumetric mapping of the cervical cord gray matter in cervical canal stenosis.** *World neurosurgery*
Smith, Z. A., Weber, K. A., Paliwal, M. n., Hopkins, B. S., Barry, A. J., Cantrell, D. n., Ganju, A. n., Koski, T. R., Parrish, T. B., Dhaheer, Y. n.
2019
- **Are Magnetic Resonance Imaging Technologies Crucial to Our Understanding of Spinal Conditions?** *The Journal of orthopaedic and sports physical therapy*
Crawford, R. J., Fortin, M. n., Weber, K. A., Smith, A. n., Elliott, J. M.
2019: 1–32
- **Deep Learning Convolutional Neural Networks for the Automatic Quantification of Muscle Fat Infiltration Following Whiplash Injury.** *Scientific reports*
Weber, K. A., Smith, A. C., Wasielewski, M. n., Egthesad, K. n., Upadhyayula, P. A., Wintermark, M. n., Hastie, T. J., Parrish, T. B., Mackey, S. n., Elliott, J. M.
2019; 9 (1): 7973
- **Establishing the inter-rater reliability of spinal cord damage manual measurement using magnetic resonance imaging.** *Spinal cord series and cases*
Cummins, D. P., Connor, J. R., Heller, K. A., Hubert, J. S., Kates, M. J., Wisniewski, K. R., Berliner, J. C., O'Dell, D. R., Elliott, J. M., Weber, K. A., Smith, A. C.
2019; 5: 20
- **Altered Cervical Spinal Cord Resting State Activity in Fibromyalgia.** *Arthritis & rheumatology (Hoboken, N.J.)*
Martucci, K. T., Weber, K. A., Mackey, S. C.
2018
- **Tract-Specific Volume Loss on 3T MRI in Patients with Cervical Spondylotic Myelopathy.** *Spine*
Hopkins, B. S., Weber, K. A., Cloney, M. B., Paliwal, M. n., Parrish, T. B., Smith, Z. A.
2018
- **High-resolution magnetization transfer MRI in patients with cervical spondylotic myelopathy.** *Journal of clinical neuroscience : official journal of the Neurosurgical Society of Australasia*
Suleiman, L. I., Weber, K. A., Rosenthal, B. D., Bhatt, S. A., Savage, J. W., Hsu, W. K., Patel, A. A., Parrish, T. B.
2018
- **Ambulatory function in motor incomplete spinal cord injury: a magnetic resonance imaging study of spinal cord edema and lower extremity muscle morphometry.** *Spinal cord*
Smith, A. C., Weber, K. A., Parrish, T. B., Hornby, T. G., Tysseling, V. M., McPherson, J. G., Wasielewski, M., Elliott, J. M.

2017

- **Thermal Stimulation Alters Cervical Spinal Cord Functional Connectivity in Humans.** *Neuroscience*
Weber, K. A., Sentis, A. I., Bernadel-Huey, O. N., Chen, Y. n., Wang, X. n., Parrish, T. B., Mackey, S. n.
2017
- **Quantitative Magnetization Transfer MRI Measurements of the Anterior Spinal cord Region are Associated with Clinical Outcomes in Cervical Spondylotic Myelopathy.** *Spine*
Cloney, M. B., Smith, Z. A., Weber, K. A., Parrish, T. B.
2017
- **Lateral corticospinal tract damage correlates with motor output in incomplete spinal cord injury.** *Archives of physical medicine and rehabilitation*
Smith, A. C., Weber, K. A., O'Dell, D. R., Parrish, T. B., Wasielewski, M. n., Elliott, J. M.
2017
- **Advancements in Imaging Technology: Do They (or Will They) Equate to Advancements in Our Knowledge of Recovery in Whiplash?** *JOURNAL OF ORTHOPAEDIC & SPORTS PHYSICAL THERAPY*
Elliott, J. M., Dayanidhi, S., Hazle, C., Hoggarth, M. A., Mcpherson, J., Sparks, C. L., Weber, K. A.
2016; 46 (10): 862-873
- **Functional Magnetic Resonance Imaging of the Cervical Spinal Cord During Thermal Stimulation Across Consecutive Runs.** *NeuroImage*
Weber, K. A., Chen, Y., Wang, X., Kahnt, T., Parrish, T. B.
2016
- **Measuring Pain for Patients Seeking Physical Therapy: Can Functional Magnetic Resonance Imaging (fMRI) Help?** *Physical therapy*
Elliott, J. M., Owen, M. n., Bishop, M. D., Sparks, C. n., Tsao, H. n., Walton, D. M., Weber, K. A., Wideman, T. H.
2016
- **White matter microstructure changes induced by motor skill learning utilizing a body machine interface.** *NeuroImage*
Wang, X., Casadio, M., Weber, K. A., Mussa-Ivaldi, F. A., Parrish, T. B.
2013; 88C: 32-40
- **Understanding inhibitory mechanisms of lumbar spinal manipulation using H-reflex and F-wave responses: A methodological approach** *JOURNAL OF NEUROSCIENCE METHODS*
Dishman, J. D., Weber, K. A., Corbin, R. L., Burke, J. R.
2012; 210 (2): 169-177
- **Non-invasive brain stimulation enhances fine motor control of the hemiparetic ankle: implications for rehabilitation** *EXPERIMENTAL BRAIN RESEARCH*
Madhavan, S., Weber, K. A., Stinear, J. W.
2011; 209 (1): 9-17
- **Chiropractic students and research: assessing the research culture at a north american chiropractic college.** *The Journal of chiropractic education*
Weber Ii, K. A., He, X.
2010; 24 (1): 35-45