

# Stanford

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## Danielle D. DeSouza

Casual - Non-Exempt, Neurology

### Bio

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#### PROJECTS

- Functional MRI and sensory evaluation of central mechanisms of chronic pain associated with Lyme disease - Stanford University (2018 - 2020)
- Investigating the role of GABA and glutamate on anterior cingulate activity associated with hypnosis - Stanford University (1/2017 - 8/2018)

### Publications

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#### PUBLICATIONS

- **Three Dimensions of Association Link Migraine Symptoms and Functional Connectivity.** *The Journal of neuroscience : the official journal of the Society for Neuroscience*  
Krimmel, S. R., DeSouza, D. D., Keaser, M. L., Sanjanwala, B. M., Cowan, R. P., Lindquist, M. A., Haythornthwaite, J. A., Seminowicz, D. A.  
2022
- **Altered Functional Network Connectivity in Chronic Migraine: a Replication-Extension Study**  
DeSouza, D., Hindiyyeh, N., Sanjanwala, B., Krimmel, S., Seminowicz, D., Cowan, R.  
LIPPINCOTT WILLIAMS & WILKINS.2021
- **Insights into chronic migraine pathophysiology - what measures of gray matter reveal.** *Cephalalgia : an international journal of headache*  
DeSouza, D. D., Cowan, R. P.  
2020: 333102420933263
- **Association between Anterior Cingulate Neurochemical Concentration and Individual Differences in Hypnotizability.** *Cerebral cortex (New York, N.Y. : 1991)*  
DeSouza, D. D., Stimpson, K. H., Baltusis, L. n., Sacchet, M. D., Gu, M. n., Hurd, R. n., Wu, H. n., Yeomans, D. C., Williams, N. n., Spiegel, D. n.  
2020
- **MCADNet: Recognizing Stages of Cognitive Impairment through Efficient Convolutional fMRI and MRI Neural Network Topology Models.** *IEEE access : practical innovations, open solutions*  
Sarraf, S., Desouza, D. D., Anderson, J., Saverino, C.  
2019; 7: 155584-155600
- **Altered structural brain network topology in chronic migraine.** *Brain structure & function*  
DeSouza, D. D., Woldeamanuel, Y. W., Sanjanwala, B. M., Bissell, D. A., Bishop, J. H., Peretz, A. n., Cowan, R. P.  
2019
- **Imaging in CDH** *Chronic Headache: A Comprehensive Guide to Evaluation and Management*  
DeSouza, D. D., Rogachov, A.  
Springer.2019; 1st: 157-168
- **High-dose spaced theta-burst TMS as a rapid-acting antidepressant in highly refractory depression.** *Brain : a journal of neurology*  
Williams, N. R., Sudheimer, K. D., Bentzley, B. S., Pannu, J. n., Stimpson, K. H., Duvio, D. n., Cherian, K. n., Hawkins, J. n., Scherrer, K. H., Vyssoki, B. n., DeSouza, D. n., Raj, K. S., Keller, et al  
2018
- **Transcranial Magnetic Simulation for Disorders other than Depression** *Transcranial Magnetic Stimulation: Clinical Applications for Psychiatric Practice*  
Pannu, J., DeSouza, D. D., Samara, Z., Raj, K. S., Williams, N. R., Lanocha, K. I.

American Psychiatric Association Publishing.2018: 157–172

- **Structural Magnetic Resonance Imaging Can Identify Trigeminal System Abnormalities in Classical Trigeminal Neuralgia** *FRONTIERS IN NEUROANATOMY*  
DeSouza, D. D., Hodaie, M., Davis, K. D.  
2016; 10
- **Individual Differences in Temporal Summation of Pain Reflect Pronociceptive and Antinociceptive Brain Structure and Function.** *The Journal of neuroscience : the official journal of the Society for Neuroscience*  
Cheng, J. C., Erpelding, N., Kucyi, A., DeSouza, D. D., Davis, K. D.  
2015; 35 (26): 9689-700
- **Reversal of insular and microstructural nerve abnormalities following effective surgical treatment for trigeminal neuralgia.** *Pain*  
DeSouza, D. D., Davis, K. D., Hodaie, M.  
2015; 156 (6): 1112-23
- **Diffusivity signatures characterize trigeminal neuralgia associated with multiple sclerosis.** *Multiple sclerosis (Houndmills, Basingstoke, England)*  
Chen, D. Q., DeSouza, D. D., Hayes, D. J., Davis, K. D., O'Connor, P., Hodaie, M.  
2015
- **Abnormal trigeminal nerve microstructure and brain white matter in idiopathic trigeminal neuralgia.** *Pain*  
DeSouza, D. D., Hodaie, M., Davis, K. D.  
2014; 155 (1): 37-44
- **Sensorimotor and Pain Modulation Brain Abnormalities in Trigeminal Neuralgia: A Paroxysmal, Sensory-Triggered Neuropathic Pain.** *PloS one*  
Desouza, D. D., Moayedi, M., Chen, D. Q., Davis, K. D., Hodaie, M.  
2013; 8 (6): e66340
- **Screening for Generalized Anxiety Disorder From Acoustic and Linguistic Features of Impromptu Speech: Prediction Model Evaluation Study.** *JMIR formative research*  
Teferra, B. G., Borwein, S., DeSouza, D. D., Rose, J.  
2022; 6 (10): e39998
- **Acoustic and Linguistic Features of Impromptu Speech and Their Association With Anxiety: Validation Study** *JMIR MENTAL HEALTH*  
Teferra, B., Borwein, S., DeSouza, D. D., Simpson, W., Rheault, L., Rose, J.  
2022; 9 (7): e36828
- **Who does what to whom? graph representations of action-predication in speech relate to psychopathological dimensions of psychosis.** *Schizophrenia (Heidelberg, Germany)*  
Nikzad, A. H., Cong, Y., Berretta, S., Hansel, K., Cho, S., Pradhan, S., Behbehani, L., DeSouza, D. D., Liberman, M. Y., Tang, S. X.  
2022; 8 (1): 58
- **The burgeoning role of speech and language assessment in schizophrenia spectrum disorders.** *Psychological medicine*  
DeSouza, D. D., Tang, S. X., Danilewitz, M.  
2022: 1-2
- **Brain and Physiological Markers of Autonomic Function Are Associated With Treatment-Related Improvements in Self-Reported Autonomic Dysfunction in Veterans With Gulf War Illness: An Exploratory Pilot Study.** *Global advances in health and medicine*  
Mathersul, D. C., Eising, C. M., DeSouza, D. D., Spiegel, D., Bayley, P. J.  
2020; 9: 2164956120922812
- **Aberrant Structural Network Architecture in Chronic Migraine**  
DeSouza, D. D., Woldeamanuel, Y. W., Sanjanwala, B. M., Bissell, D., Bishop, J. H., Cowan, R. P.  
SAGE PUBLICATIONS LTD.2019: 392
- **Clinical Features Contributing to Cortical Thickness Changes in Chronic Migraine - A Pilot Study** *HEADACHE*  
Woldeamanuel, Y. W., DeSouza, D. D., Sanjanwala, B. M., Cowan, R. P.  
2019; 59 (2): 180–91
- **High-Dose Spaced Theta-Burst Transcranial Magnetic Stimulation as a Rapid-Acting Anti-Depressant in Highly Refractory Depression**

Williams, N., Sudheimer, K., Bentzley, B., Pannu, J., Stimpson, K., Duvio, D., Cherian, K., Hawkins, J., Scherrer, K., Vyssoki, B., DeSouza, D., Raj, K., Keller, et al  
ELSEVIER SCIENCE INC.2018: S191

- **High-Dose Theta-Burst Transcranial Magnetic Stimulation Modulates Heart Rate Variability**  
Pannu, J., Kallioniemi, E., Gulser, M., Stimpson, K., DeSouza, D., Sudheimer, K., Williams, N.  
ELSEVIER SCIENCE INC.2018: S189
- **Modulation of the Neural Circuitry Underlying Trait Hypnotizability With Spaced Continuous Theta-Burst Stimulation**  
Williams, N., Sudheimer, K., Stimpson, K., Duvio, D., Chung, C., DeSouza, D., Jo, B., Williams, L., Yeomans, D., Spiegel, D.  
NATURE PUBLISHING GROUP.2017: S508–S509
- **Comparison of Diffusion-Weighted MRI Reconstruction Methods for Visualization of Cranial Nerves in Posterior Fossa Surgery.** *Frontiers in neuroscience*  
Behan, B. n., Chen, D. Q., Sammartino, F. n., DeSouza, D. D., Wharton-Shukster, E. n., Hodaie, M. n.  
2017; 11: 554
- **Journal Club: Exacerbation of headache during dihydroergotamine for chronic migraine does not alter outcome.** *Neurology*  
Woldeamanuel, Y. W., O'Hare, M., DeSouza, D. D., Cowan, R. P.  
2016; 87 (16): e196-e198
- **Journal Club: Change in brain network connectivity during PACAP38-induced migraine attacks.** *Neurology*  
DeSouza, D. D., O'Hare, M., Woldeamanuel, Y. W., Cowan, R. P.  
2016; 87 (16): e199-e202
- **Discriminating neural representations of physical and social pains: how multivariate statistics challenge the 'shared representation' theory of pain.** *Journal of neurophysiology*  
Rogachov, A., Cheng, J. C., DeSouza, D. D.  
2015: jn.00075.2015
- **Diffusion imaging in trigeminal neuralgia reveals abnormal trigeminal nerve and brain white matter.** *Pain*  
DeSouza, D. D., Hodaie, M., Davis, K. D.  
2014; 155 (9): 1905-1906
- **Making Sense of Gray Matter Abnormalities in Chronic Orofacial Pain-Synthesizing Divergent Findings** *JOURNAL OF NEUROSCIENCE*  
Moayed, M., DeSouza, D., Erpelding, N.  
2011; 31 (35): 12396-12397
- **Use of Diffusion Tensor Imaging to Examine Subacute White Matter Injury Progression in Moderate to Severe Traumatic Brain Injury** *ARCHIVES OF PHYSICAL MEDICINE AND REHABILITATION*  
Greenberg, G., Mikulis, D. J., Ng, K., DeSouza, D., Green, R. E.  
2008; 89 (12): S45-S50