K08NS104080, "Parietal-hippocampal interaction during episodic memory encoding and retrieval." Role: PI 3/18-7/18

NIH KL2/UT Southwestern Center for Translational Medicine, "Using gene expression profiles to understand brain oscillations in episodic memory." 4/17—1/18 Role: Co- PI (Konopka)

University of Texas BRAIN initiative seed grant, PC366532, "Comparing intracranial EEG, fMRI, and gene expression profiles in humans." 6/15 - 6/16 Role: PI

UT Southwestern Crowley Foundation seed grant, "Electrophysiological studies of cognition in neurosurgical patients." 1/15 - 1/16 Role: PI

Lega, NIH Loan Repayment Program, "Electrophysiological Studies of Human Memory," 6/11 - 6/13

Refereed Papers (selected):

Lin, J., Rugg, M. D. & Lega, B. C. (**2018**). "High gamma oscillations distinguish functional properties of the anterior versus posterior human hippocampus." Hippocampus. *in press*

Arora, A., Gasperian, A., Lin, J., Maldjian, J., Stein, J., Kahana, M., & Lega, B.C. (**2018)**. "Comparison of logistic regression, support vector machines, and deep learning classifiers for predicting memory encoding success using human intracranial EEG recordings." Journal of Neural Engineering. *in press*

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Ezzyat, Y., Wanda, P.A., Levy, D.F., Kadel, A., Aka, A., Pedisich, I., Sperling, M.R., Sharan, A.D., Lega, B.C., Burks, A. and Gross, R.E., (**2018**). Closed-loop stimulation of temporal cortex rescues functional networks and improves memory. Nature communications, 9(1), p.365

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Zaghloul, K.A., Weidemann, C., Lega, B,C., Jaggi, J., Baltuch, G.H., Kahana, M.J., "Neuronal activity in the human subthalamic nucleus encodes decision conflict during action selection." (**2012**) Journal of Neuroscience 32(7): 2453-2460.

Jacobs, J., Lega, B.C., Anderson, C., "Explaining how brain stimulation can evoke memories." (**2011**) Journal of Cognitive Neuroscience, doi:10.1162/jocn_a_00170

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Lega, B.C., Halpern, C., Jaggi, J.L., Baltuch, G.H., "Deep Brain Stimulation in the Treatment of Refractory Epilepsy: Update on Current Data and Future Directions." July (**2009**: Neurobiology of Disease

Lega B.C., Wilfong A.A., Goldsmith I.L., Verma A., Yoshor D., "Cortical resection tailored to awake, intraoperative ictal recordings and motor mapping in the treatment of intractable epilepsia partialis continua: report of two cases." (2009) Neurosurgery 64(3 Suppl):195-6.

Yoshor D., Bosking W.H., Lega B.C., Sun P., Maunsell J.H., "Local cortical function after uncomplicated subdural electrode implantation. Laboratory investigation." (2008) Journal of Neurosurgery 108(1):139-44.

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Book Chapters:

Neely, O., Podkorytova, I., Lega, B.C., "Stereo EEG in the treatment of refractory epilepsy." Epilepsy Surgery: Techniques. Gordon Baltuch ed. Thieme, in press.

Lega, B.C., Watrous, A., Jacobs, J., "Human hippocampal theta oscillations: Distinctive features and interspecies commonalities." Human brain oscillations, in press.

Lega B.C., Whitmore R.G., Sanborn M., Schuster J., "Neurosurgery." The Surgical Review. Robert Roses, ed. Lippincott Williams & Wilkins, 2011.

Lega, B.C., Newman, J., Welch, W., Lee, J.Y.K., "Transoral Approach to the Craniovertebral Junction." Surgical Atlas of Spine Surgery. Alexander Vaccaro and James Eck, eds. Jaypee Brothers, New Delhi, 2011.

Lega, B.C., Baltuch, G.H., "Anterior Thalamic Modulation in the Treatment of Epilepsy." Neuromodulation. Arthur Cukiert, ed. Sao Paolo, 2010.

NIH Study Sections:

Recording and Modulation in the Human CNS (2017 - present)

Ad Hoc Reviewer:
Journal of Emergency Medicine, Journal of Psychiatry, Neurosurgery, Journal of Cognitive Neuroscience

Memberships in Professional and Scientific Societies:

National Societies:
American Association of Neurological Surgeons
Congress of Neurological Surgeons
American Epilepsy Society
Society for Neuroscience
Cognitive Neuroscience Society

State Societies:
Texas Epilepsy Foundation, member of professional advisory board

Invited Lectures and Presentations:

Dallas Neurology School Lecture, September 2017
Circle of Friends Lecture, Center for Vital Longevity, February 2018
Research Day Lecture, Department of Psychiatry, April 2018
Context and Episodic Memory Symposium, May 2018
Visiting Professor, Iowa Department of Neurosurgery, July 2018