

Peer Reviewed Publications

1. **Jones SR**, Pinto DJ, Kaper TJ, Kopell N. Alpha-frequency rhythms desynchronize over long cortical distances: a modeling study. *J Comput Neurosci*. 2000;9(3):271-91.
2. **Jones SR**, Mulloney B, Kaper TJ, Kopell N. Coordination of cellular pattern-generating circuits that control limb movements: the sources of stable differences in intersegmental phases. *J Neurosci*. 2003;23(8):3457-68.
3. Garabedian CE, **Jones SR***, Merzenich MM, Dale A, Moore CI. Band-pass response properties of rat SI neurons. *J Neurophysiol*. 2003;90(3):1379-91. ***First author contribution on computational modeling component.**
4. Pinto DJ, **Jones SR**, Kaper TJ, Kopell N. Analysis of state-dependent transitions in frequency and long-distance coordination in a model oscillatory cortical circuit. *J Comput. Neurosci*. 2003;15(2):283-98.
5. Devor A, Ulbert I, Dunn AK, Narayanan SN, **Jones SR**, Andermann ML, Boas DA, Dale AM. Coupling of the cortical hemodynamic response to cortical and thalamic neuronal activity. *Proc Natl Acad Sci U S A*. 2005;102(10):3822-7.
6. **Jones SR**, Kopell N. Local network parameters can affect inter-network phase lags in central pattern generators. *J Math Biol*. 2006;52(1):115-40.
7. **Jones SR**, Pritchett DL, Stufflebeam SM, Hamalainen, M, Moore CI. Neural Correlates of Tactile Detection: A Combined MEG and Biophysically Based Computational Modeling Study. *J. Neurosci*. 2007;27(40):10751-10764.
8. Boas DA, **Jones SR**, Devor A, Huppert TJ, Dunn AK, Dale AM. A Vascular Anatomical Network Model of the Spatio-Temporal Response to Brain Activation. *Neuroimage*. 2008;40(3):1116-29.
9. **Jones SR**, Pritchett DL, Stufflebeam SM, Sikora M, Hamalainen MS, Moore CI. Quantitative Analysis and Biophysically-Realistic Modeling of the MEG Mu Rhythm: Rhythmogenesis and Modulation of Sensory Evoked Responses. *J. Neurophys*. 2009;102(6):3554-72.
10. Ziegler DA, Pritchett DL, Hosseini-Varnamkhast P, Suzanne Corkin, H_m_l_inen MS, Moore CI, **Jones SR**. Transformations in Oscillatory Activity and Evoked Responses in Primary Somatosensory Cortex in Middle Age: A Combined Computational Neural Modeling and MEG Study. *Neuroimage*. 2010;52(3):897-912.
11. **Jones SR***, Kerr CE*, Wan Q, Pritchett DL, Hamalainen MS, Moore CI. Cued Spatial Attention Drives Representation-Specific Modulation of The Alpha Rhythm in Primary Somatosensory Cortex. *J. Neurosci*. 2010;30(41):13760-5. *** Joint first author contributions.**
12. Vierling-Claassen D, Cardin JA, Moore CI, **Jones SR**. Computational Modeling Of Distinct Neocortical Oscillations Driven By Cell-Type Selective Optogenetic Drive: Separable Resonant Circuits Controlled By Low-Threshold Spiking And Fast-Spiking Interneurons. *Frontiers in Human Neuroscience: Special Issue on Origin and Consequences of Rhythmic activity*. 2010 Nov 22, 4:198
13. Carlen M, Konstantinos M, Siegle JH, Cardin JA, Fatai F, Vierling-Claassen D, Ruhlmann C, **Jones SR***, Deisseroth K, Sheng M, Moore CI, Tsai L . A Critical Role for NMDAR n Parvalbumin Interneurons for Gamma Rhythm Induction and Cognitive Function. *Molecular Psychiatry*. 2011 Epub 4/11. *** Senior author contribution on computational modeling component.**
14. Kerr CE*, **Jones SR***, Wan Q, Pritchett DL, Wasserman RH, Wexler A, Villanueva JJ, Shaw JR, Kaptchuk TJ, Littenberg R, Hamalainen MS, Moore CI. . Effects of Mindfulness Meditation Training on Cortical Dyamics: A MEG Study of Alpha Rhythm Modulation in SI. *Brain Research Bulletin*. 2011 85(3-4):96-103. *** Joint first author contributions.**
15. Wan Q, Kerr CE, Pritchett D, Hamalainen M, Moore CI, **Jones SR**. Dynamics of Dynamics Within A Single Data Acquisition Session: Variation in Neocortical Alpha Oscillations in Human MEG.

15. Wan Q, Kerr CE, Pritchett D, Hamalainen M, Moore CI, **Jones SR**. Dynamics of Dynamics Within A Single Data Acquisition Session: Variation in Neocortical Alpha Oscillations in Human MEG. *PloS One*. 2011;6(9):e24941

Book Chapters

- 2011 **Stephanie R. Jones**. “Biophysically Principled Computational Neural Network Modeling of Magneto-/Electro- Encephalography Measured Human Brain Oscillations”. Chapter in ‘Neural Methods’ Textbook. Springer Publishing; Editors: Fellin and Hallasa (In Press)
- 2012 Dorea Vierling-Claassen & **Stephanie R. Jones**. “Neural Rhythms”. Chapter in ‘From Neurons to Cognition: Computational Neuroscience’ Textbook. MIT Press; Editor: Arbib (In Preparation: 2012 Publication)