

CURRICULUM VITAE

Carl J. Biver, Ph.D.

I. EDUCATION

University of South Florida, Tampa, Fl., B.S. 1988 (Chemistry)

University of South Florida, Tampa, Fl., Ph.D. 1993 (Physical Chemistry)

II. ACADEMIC APPOINTMENTS AND WORK HISTORY

1988 to 1993 – Laboratory Instructor, University of South Florida, Department of Chemistry, Tampa, Florida.

1993 – Adjunct Chemistry Professor, University of South Florida, Department of Chemistry, Tampa, Florida.

1993 to 1995 – Research and Development Scientist, Innova Pure Water, Clearwater, Florida.

1995 to 2006 - Research Associate, Department of Defense Head Injury Program (DVHIP), Bay Pines Foundation, Inc., Bay Pines, Florida.

2006 to Present - Systems Analysts and Programmer, Applied Neuroscience, Inc., Responsible for 'C' and 'C++' Windows programming; IDL Programming, EEG and MRI analyses.

III. BIBLIOGRAPHY

A. JOURNAL ARTICLES

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Thatcher R.W., Biver, C.L., Gomez-Molina J.F., North, D., Curtin, R. and Walker, R.W., and Salazar, A. Estimation of the EEG Power Spectrum by MRI T2 Relaxation Time in Traumatic Brain Injury. *Clinical Neurophysiology*, 131: 1724-1738, 2001.

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Thatcher, R.W., Walker, R.A., Biver, C., North, D., Curtin, R., Quantitative EEG Normative databases: Validation and Clinical Correlation, *J. Neurotherapy*, 7 (No. 3/4): 87 – 122, 2003.

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Thatcher, R.W., North, D., and Biver, C. EEG and Intelligence: Univariate and Multivariate Comparisons Between EEG Coherence, EEG Phase Delay and Power. *Clinical Neurophysiology*, 2005, 116(9):2129-2141.

Thatcher, R.W., North, D., and Biver, C. Intelligence and EEG current density using low resolution electromagnetic tomography (LORETA), *Human Brain Mapping*, May 25, 2006.

Thatcher, R.W., Biver, C. J., and North, D. Spatial-Temporal Current Source Correlations and Cortical Connectivity, *Clin. EEG and Neuroscience*, 38(1): 35-48, 2007.

Thatcher, R.W., Biver, C. J., and North, D. Intelligence and EEG current density using Low Resolution Electromagnetic Tomography, *Human Brain Mapping*, 2007, 28(2): 118 – 133.

Thatcher, R.W., North, D., and Biver, C. Development of cortical connectivity as measured by EEG coherence and phase. *Human Brain Mapp.*, 2008, 12:1400-1415

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Thatcher, R.W., Palmero-Soler, E., North, D., and Biver, C. (2016). Intelligence and EEG measures of information flow: Efficiency and Homeostatic Neuroplasticity. *Sci. Rep.* 6, 38890; doi: 10.1038/srep38890

B. PUBLISHED ABSTRACTS

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Thatcher, R. W., Biver, C., Camacho, M., McAlaster, R and Salazar, A.M. A demonstration of a biophysical linkage between MRI, EEG and Cognition in traumatic brain injury. *Third International Conference on Functional Mapping of the Human Brain*, Copenhagen, Denmark, May 19-23, 1997.

Thatcher, R. W., Biver, C., Camacho, M., McAlaster, R and Salazar, A.M. Biophysical linkage between MRI, EEG and Cognition in traumatic brain injury. *14th Internal Congress of EEG and Clinical Neurophysiology*, Florence, Italy, August 24-30, 1997.

Thatcher, R. W., Biver, C., and Salazar, A.M. Biophysical Integration of MRI, EEG and Cognition in TBI Patients. *Society of Neuronal Regulation Annual Meeting*, Aspen, Colorado, September 16-21, 1997.

Thatcher, R. W., Biver, C., and Salazar, A.M. Bloch Equation MRI Simulation for the Evaluation of Brain Injury in TBI Patients. *Fifteenth Annual Meeting, National Neurotrauma Society*, New Orleans, Louisiana, October 24-25, 1997.

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Thatcher, R. W., Biver, C., and Salazar, A.M. 3-Dimensional Volume analysis of MRI Relaxometry and EEG Amplitude in Closed Head Injury. *Twenty First Annual Meeting of the American Society of Neuroimaging*. February 25 to 28, 1998, Orlando, Florida.

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Thatcher, R. W., Biver, C., McAlaster, R and Salazar, A.M. Biophysical linkage between MRI and EEG coherence in normals and traumatic brain injury. *4th International Conference on Functional Mapping of the Human Brain*, Montreal, Quebec, June 7 – 12, 1998.

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