

NEUROGUIDE WORKSHOP OUTLINE

**January 23-24, 2016 at the Double Tree Resort in Redington
Shores, FL**

A Modular Approach to Linking Symptoms to Dysregulation of Networks in the Brain

**1st day (January 23, 2016) - A Practical Hands on Approach:
How to go from Clinical History to EEG Acquisition to
QEEG Analysis (including LORETA). Learn about New add
ons, such as the Automatic Clinical Report Writer, NeuroLink
that allows the patient to rank the symptom check list with 10
different categories of symptoms and radar maps and line
graphs to evaluate the progress of treatment. See the new
Evoked Potential add on.**

**2nd Day (January 24, 2016) – Review of patient’s EEG data and
Hands on from EEG recording to Assessment to Z Score
Biofeedback in a Single Session and New Add Ons (LORETA
Coherence, LORETA Phase Differences, LORETA Phase
Reset) and New Advances: Automatic Clinic Report and
Event Related Potentials and a hands on Demonstration of
Surface, LORETA Neurofeedback and BrainSurfer**

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September 19, 2015 (1st Day)

- 1. Start with the patient's clinical history and symptoms and hypothesize how the brain's localization of function properties are linked to the patient's clinical history.**
- 2. Learn how to import digital EEG data and to visually examine the EEG tracings and how to recognize artifact and how to re-montage (average reference, Laplacian, Bipolar, common reference by a mouse click).**
- 3. Learn how to Automatically Eliminate artifact and how to measure the Test Re-Test Reliability and the Quality of your recordings.**
- 4. Learn how to examine EEG traces and dynamically link visual events in the EEG tracings to the QEEG. Learn how to avoid bias in the selections of EEG for QEEG analysis.**
- 5. Learn how to eliminate the effects of medication by using the Laplacian transform.**
- 6. Learn how to use LORETA to confirm localization hypotheses to help link the localization of the "weak" functional systems of the brain related to the patient's symptoms in contrast to "Compensatory" systems.**
- 7- Learn how to interpret power, coherence and phase delays in terms of convergent anatomical information and again link to the patient's symptoms.**
- 8- Learn how to interpret discriminant functions and to hypothesize links between the discriminant function and the patient's clinical history.**
- 9. Learn how to use the Automatic Clinical Report Writer (ACR) to produce a clinic report by linking the diffuse and localized EEG measures to Brain Function and to the patient's clinical history and symptoms.**

September 20, 2015 (2nd day)

- 1. Review assessment and linking symptoms to dysregulation in networks of the brain. We will record EEG and do Neurofeedback on a volunteer subject – please be ready if you want to volunteer!**
- 2. Bring patient EEG data to be reviewed to learn more about elimination of artifact, improved quality of recordings and how to link symptoms to the exemplar patient's brains**
- 3. Learn how to immediately begin Neurofeedback in the same session using a Symptom Check List to generate functional localization hypotheses and to test the hypotheses using the patient's QEEG Z Scores by simple mouse clicks.**
- 4. Learn how to develop an individualized neurofeedback protocol based on the strategy to minimize abnormal EEG deviations integrated with other measures including the patients clinical history and the clinician's judgment.**
- 5. Use the symptom check list to hypothesize “weak” vs “compensatory” brain systems and to automatically create a 19 channel Z Score biofeedback protocol based on the match of hypothesized weak systems to deviant QEEG Z Scores.**
- 6. Learn how to use BrainSurfer – Network NFB of current density, LORETA coherence, LORETA phase differences and LORETA phase reset**
- 7. Learn about new add ons such as LORETA coherence and phase and LORETA phase reset**
- 8. Learn about the new automatic Clinic Report Writer. Use your own logo and business affiliation, once the EEG artifact has been removed then launch the clinic report writer and a report will be ready to be printed in about 5 minutes.**
- 9. Learn about the new NeuroLink self-assessment and how to seamlessly link symptoms to dysregulation in brain networks**

10. Learn about the new Event Related Potential module inside of Neuroguide. See how to produce pattern reversal ERPs and select specific scalp locations, compare different ERPs and scalp rendered movies of the ERP