April 22 – 24 and 28/ 29 in Switzerland

5-Day Quantitative EEG Training (qEEG) professional training course according to the certification requirements of BCIA and QEEG Certification Board at the Swiss Institute for Neurofeedback and Biofeedback

Description:
This course will provide a comprehensive overview of quantitative EEG (qEEG) from initial recording through assessing the resulting EEG tracing to a final interpretation of the results linking symptoms to findings and ultimately leading to directed training approaches using qEEG guided interventions. This course fulfills the didactic training requirements for board certification in EEG Biofeedback (Neurofeedback - BCN) from the Biofeedback Certification International Alliance (BCIA) and for board certification in QEEG (QEEG-T or D) from the QEEG Certification Board.

This will be an intensively experiential workshop with much of the content presented in a laboratory format. Demonstrations will introduce skills and subsequent practical opportunities will allow participants to apply those skills using high quality hardware and software platforms.

Each stage of the training process will integrate theory with practice so that participants will have a thorough understanding of all aspects of the qEEG field. This course will also provide direction and materials for further study to insure that participants continue to progress and further master the skills learned in class.

Course participants will work with state-of-the-art equipment every day and try out interventions that are based upon approaches validated by decades of published research. We will also experiment with newer techniques such as 19 channel z-score training and will compare the benefits of these approaches so that participants may draw their own conclusions. Multi-site EEG recordings will be demonstrated and 80% of the course will be devoted to quantitative EEG assessment with lecture and lab experiences to facilitate understanding in this important area of practice.

Instructor:
John S. Anderson MA, LADC, BCB, BCN, QEEGD
instructor, clinician mentor and therapist sponsored by Stens-Corporation/ Stens Biofeedback USA

Organizer and Sponsor:
Dr. oec. Eva Otzen-Wehmeyer, certified Neuro- and Biofeedback Therapist and Director of the Swiss Institute for Neurofeedback and Biofeedback AG; www.i-nfbf.ch

Language: English
Location: Rte de Vevey 100, CH-1807 Blonay, Switzerland
Time : 9h15 – 17h00
Price : CHF 3000,- for the 5 days training
For admissions and sign-up contact Eva Otzen : eva.otzen@gmail.com
5-Day Quantitative EEG Training (qEEG) professional training course

Schedule and Outline


Introduction and Welcome by Eva Otzen and John Anderson

10-20 International System of Electrode Placement

Initial EEG Recording Procedures
Care of equipment
Application of cap and/or individual sensors
Testing for impedance and/or DC offset
Artifact testing and elimination
Recording protocols
Tasks
Clinical Hygiene

Demonstration: 19+ Channel EEG Recording

Lunch

Lab 1 – Record 19+ Channel EEG
Observation of EEG tracing
Elimination of 50/60 Hz
Connection variables
Identification of artifact
Clinically relevant indicators
Progressing through the task sequence
Length of behavioral periods
Saving/marking data segments

Initial Assessment of Recorded EEG

Evening Studies: Read “EEG: Origin and Measurement” by Fernando Lopes da Silva

Demonstration: Visual Inspection - Evaluating the EEG
- Standard EEG patterns
- Abnormal patterns
- Recognizing artifact

Montages, Spectral and Topographic Aspects of EEG

Lab 2 – Second Recording of 19+ Channel EEG
- Observation of EEG tracing, etc.

Lunch

Toward a Deeper Understanding of the EEG Tracing
- How to evaluate the EEG
- Cautions about reference contamination
- Cautions about other source contamination
- Drawing conclusions

Lab 3 – Practice the visual inspection of your partner’s EEG

Evening Studies – Review QEEG example reports on flash drive


Clinical and Cognitive Aspects of EEG Interpretation
- Discussion of interpretation variables
- Interpretation and extrapolation of findings to training variables

Drug Effects on EEG

Structured Record Keeping
- Know where your data are
- Be consistent and organized and maintain client confidentiality

Lunch

Demonstration: Utilization of a Quantitative EEG (QEEG) Database (NeuroGuide)

Lab 3 – Process Recorded EEG into NeuroGuide Database
- Assess quality of recording
- Develop initial hypothesis
- Utilize multiple montage approach to source localization and hypothesis testing
- Use standard database tools to assess statistical variance
- Interface with LORETA to further evaluate source localization

Lab 4 – Continue processing data, produce topographic and tabular representations, confirm or disprove hypothesis, begin report writing functions

Studies in preparation for Days 4 & 5 – Write a comprehensive report on the findings derived from your lab partner and produce a PDF document (adequate copies) to be shared with other class members on days 4 & 5

**Class participant reports**
Course participants will present their reports for class discussion and critique

**Lunch**

**Clinical Utility and Practices in QEEG**
- Imaging Technologies
- Electroencephalography
- Acceptance
- Normative Databases
- Assessment and Training
- Evaluation and Results
- Utility of normative data analysis vs visual inspection
- Cautions regarding data corruption and misleading findings – critical evaluation skills

**Continue with Class participant reports**
Course participants will present their reports for class discussion and critique

Evening Studies Read: *Quantitative EEG & Neurofeedback in Children & Adolescents*, Simkin, Lubar & Thatcher
*in manual & on flash drive*

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**Continue Class participant reports**
Course participants will present their reports for class discussion and critique

**Lunch**

Presentation of example EEG data and subsequent QEEG analysis and report functions using a variety of available evaluation tools

Review and re-analysis of example EEG data from selected participant reports

FINAL