

The Absolute Basics: Beginners EEG Recording and QEEG Analysis

ANSA Post-Conference Workshop, Pullman International Cairns, Monday 26th & Tuesday 27th August 2019

Presenters: Rivi Sela & Michelle Aniftos

Register at [Eventbrite \(click to view website\)](#)

Silver Sponsor: [Brain, Mind & Memory Institute](#)

EEG and Quantitative EEG (qEEG) are valuable tools for supporting the diagnosis and targeted, effective therapy of a host of different neuropsychological disorders. This 2-day workshop will align with the [International QEEG Certification Board](#) to demonstrate step-by-step how to record and analyze EEGs (electroencephalographic representations of brain activity) including:

- EEG artifact detection and QEEG Practical Analysis for Neurofeedback Application (12 hours)
 - Editing raw EEG and artifacts
 - Physiologic
 - Extra-physiologic
 - Movements in the environment
 - Database Analysis
 - subject inclusion and exclusion criteria
 - statistical considerations within databases
 - Clinical and Cognitive Aspects of the EEG
 - developmental changes
 - origins of the EEG
 - EEG phenotypes and EEG signatures which should be referred to specialists
 - cognitive and clinical presentations before and following neurofeedback
 - Montages and Spectral & Topographic Aspects of the EEG
 - definitions and applications
 - origin of EEG & frequency bands
 - displaying results and terminology in QEEG

- Clinical Neurophysiology & Neuroanatomy (2 hours)



Dr. Rivi Sela QEEG-D is the co-founder and CEO of BetterFly Neurofeedback, an innovative cloud-based neurofeedback technology that allows clinicians to treat patients both in the clinic and at the patient's home. Rivi pioneered the neurofeedback field in Israel and has trained many neurofeedback clinicians. She founded the BrainGames-Israel clinics ten years ago, and treated hundreds of patients suffering from ADHD, epilepsy, autism, anxiety and depression. Under her supervision, the BrainGames clinics have provided diagnostic evaluations, QEEG recordings and analyses and non-drug interventions to patients of all ages, children and adults. Prior to embarking on her neurofeedback career, Rivi served for many years as the Chief Technology Director of the Sheba Hospital, the largest medical centre in Israel, and specialized in developing and implementing clinical technologies, including hardware and software, collaborating with leading companies from around the world. Rivi is a Diplomate of the International QEEG Certification Board. Contact: rivi@braingames-israel.com



Michelle Aniftos BCN QEEG-D is a Clinical Psychologist and Director of a private mental health practice (Mylne Street Mental Health) in Toowoomba, Queensland. She has been accredited by Australian Health Practitioner Regulation Agency and the Australian Psychological Society's Clinical College as a Supervisor of provisional and registered psychologists, and clinical registrars. Michelle is an inaugural member and past Convener of the Australian Neurofeedback & Psychology Interest Group; President and Fellow of the Applied Neuroscience Society of Australasia; and Chair of the Biofeedback Certification International Alliance - Australia. Michelle has neurofeedback certification with BCIA-Australia and is a Diplomate of the International QEEG Certification Board. Contact: michelle@msmh.com.au

BEGINNERS EEG RECORDING AND QEEG ANALYSIS: 2-Day Overview

Day One, Monday 26th August

8.30 – 9am	<i>Registrations & Refreshments.</i> <i>Technical assistance available to set up computers.</i>
9am – 11am	The EEG Signal & 10/20 System: Neurophysiology & Neuroanatomy
11 – 11.15	<i>Refreshments</i>
11.15 – 1.15	EEG Waveforms/Phenotypes in Cognitive and Clinical Presentations
1.15 – 2pm	<i>Lunch Break</i>
2 – 3.30pm	EEG Hardware for Good Quality Data Acquisition: Recording EEG <ul style="list-style-type: none"> - Amplifiers - Caps/Electrodes - Client preparations before the qEEG appointment - Recording montages, filters, transforms and power displays - Recording eyes closed and eyes open - Demonstrating artifacts (physiologic, extra-physiologic, environmental)
3.30 – 4pm	<i>Refreshments</i>
4 – 5.30pm	EEG Software for Editing and Artifacts <ul style="list-style-type: none"> - Software options (questions to consider before choosing) - Intro WinEEG (key features/benefits) - Artifacts (developing a standard protocol) - Displaying the data

Day Two, Tuesday 27th August

8.30 – 9am	<i>Registrations & Refreshments.</i> <i>Technical assistance available to set up computers.</i>
9am – 11am	EEG Interpretation <ul style="list-style-type: none"> - Artifact Pretest! - Spectral analyses: FFT, frequency, amplitude, morphology, power, magnitude - Source analysis and understandings
11 – 11.15	<i>Refreshments</i>
11.15 – 1.15	Practical QEEG Analysis & Indications for Neurofeedback <ul style="list-style-type: none"> - Comparison to database (& comparison of databases) <ul style="list-style-type: none"> > Comparing to database with eyes-open and eyes-closed > Absolute and relative comparisons. > Calculating Ratios
1.15 – 2pm	<i>Lunch Break</i>
2 – 3.30pm	Practical QEEG Analysis <i>continued</i>
3.30 – 4pm	<i>Refreshments</i>
4 – 5.30pm	Reporting Findings & Recommendations

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QEEG Certification Candidates, please note:

As of June 2018, the [QEEG Certification Board](#) (IQCB) accredited coursework toward QEEG Certification, must adhere to a 36-hour curriculum. In order to accommodate candidates who are in the middle of the certification process, the board is granting individuals who have applied as a candidate and taken an approved 24-hour prior to January 1, 2019 a grace period to complete their certification by December 31, 2019 without having to supplement their didactic training with an extra 12 hours.

Any candidate who is not certified by the end of 2019 will have submit evidence of having completed 36 hours of didactic training. Previous candidates completed a 24-hour course including the following modules which are subject to examination for Certification candidates:

1. Editing raw EEG and artifacts
2. Drug Effects
3. Database Analysis
4. Clinical and Cognitive Aspects
5. Montages and Spectral and Topographic Aspects of the EEG

The new 36-hour blueprint includes the following learning domains:

6. Basic Neurophysiology & Neuroanatomy (4 hours)
7. QEEG Analysis & Neurofeedback Application; (6 hours)
8. Ethical & Professional Conduct (2 hours)
9. Practicum, including artifact detection (6 hours)

Participants in the ANSA *Absolute Basics* workshop will receive a certificate acknowledging completion of Module 7 and Module 9 plus 2 hours credit toward Module 6.

If completion of Module 6 and Module 8 is sought, these may be undertaken via online supervision with Michelle Aniftos. Please enquire via michelle@msmh.com.au