

International QEEG Certification Board (IQCB)

About the Award

This award is for two separate \$1,000 USD awards. One award is for the most outstanding paper, presentation or poster presented at the ISNR Annual Conference utilizing QEEG in some way, and the other award for the best use of QEEG in clinical practice, also to be a paper, presentation, or poster presented at the ISNR Annual Conference. The goal is to encourage the use of QEEG in scientific research and clinical practice.

Requirements:

- Must be a part-time or full-time student for the current or previous year
- Must be a current ISNR Student Affiliate member
- Must volunteer for a minimum of three (3) hours at the ISNR Annual Conference. Discretion and time of the volunteer coordinate is required.
- Attendance at the annual conference in required to receive the award.

Click <u>here</u> to view current awards.

IQCB is pleased to announce the 2022 Winners!



Lisa Bortolotto 2022 Award Winner

Lisa Bortolotto is an Italian psychologist graduate and licensed in cognitive-behavioural therapy and an electronic and telecommunication expert. She graduated at the school for cognitive behaviour psychotherapy ITCC in Padova which is affiliated with the italian and european association for cognitive behaviour therapy discussing 8 treated cases required. She has a previous bachelor degree in psychology from Padova University and a master degree in psychology from IUSVE Istituto Universitario Salesiano Venezia. Her clinical work is characterised by the integration of different approaches: CBT, trauma treatment, Schema Therapy, Brainspotting, NARM Neuroaffective Relational Model, Imago couple therapy as well as biofeedback, neurofeedback and qEEG.

She belongs to various international organizations in the field of mental health: The International Society of Neuroregulation and Research (ISNR), the Association for Applied Psychophysiology and Biofeedback

(AAPB), the Italian Society of Schema Therapy (SIST) and the Italian Association of Behavioural Analysis and Modification (*Associazione Italiana Analisi e Modificazione del Comportamento* – AIAMC) and the Europeans EABCT (European Association for Behavioural and Cognitive Therapies). Her main areas of interest and research include qEEG, as well as biofeedback and neurofeedback to treat psychological and physical trauma, autism spectrum disorders, eating disorders and personality disorders. As a clinician she uses the assessments to tailor the evidence-based intervention and monitor the proceeding of the treatment. qEEG, Neuroguide comparison after the raw EEG and power spectral analysis were collected and discussed with her mentors Ainat Rogel and Jay Gunkelman. All physiological data were also compared with psychological testing and interpreted in the patients disorders and life story with CBT psychotherapy clinicians and monitor the success during the therapy records and follow up.

Johanna N. Rodríguez-Beato is in her 5th year of Clinical Psychology Ph.D. program at the School of Brain and Behavioral Sciences at Ponce Health Sciences University in Puerto Rico. Rodriguez-Beato has experience working on different research projects related to trauma, neurocoanitive disabilities. learning difficulties. coanitive psychometric properties for the neurorehabilitation services, Cognitive Assessment System 2 (CAS2: ES), the feasibility of the computerized interventions, among others. For the last year, Rodríguez-Beato has been involved as a research assistant in the Neurocognitive Lab, led by Dr. Ismael Castillo-Reyes. As a research assistant, Ms. Rodríguez-Beato has learned and assisted in conducting research related to QEEG-guided neurofeedback, eventrelated potentials, and neurocognitive assessment on stroke and TBI patients. Her core research and clinical interests are cognitive neuroscience. neurorehabilitation. neuropsychology, and



Johanna N. Rodriguez-Beato 2022 Award Winner

implementing integrated behavioral health services in primary care and specialized HIV patients. Her plans consist on enhancing proficiency in the use of QEEG-guided neurofeedback and neurocognitive performance for the intervention of memory deficits, selective attention, and processing speed in HIV patients suffering from the effects of traumatic stressors.

Congratulations, Lisa & Johanna!

LISA BORTOLOTTO & AINAT ROGEL :PLENARY SESSION

Friday, July 29th:

7:00 AM - 8:00 AM



Plenary Session: Neurophysiological Psychological and Social Assessment to define an integrative treatment of Neurofeedback and psychotherapy Presented by: Lisa Bortolotto & Ainat Rogel Affiliation: Boston Neurodynamics

Room Location: MAIN AUDITORIUM (OCEANS 5-8)

Abstract:

This presentation focuses on an integration of Neurofeedback and CBT/Schema Therapy as treating clients as well as combining qEEG and CBT as assessment for the treatment. The CBT Assessment (Sanavio) is an evaluation of the problem reported by the patient in order to conceptualize and understand the process or mechanism to explain the problem, define the therapy goal, and the treatment strategy. The hypothesis and measurements will be compared in baseline, midpoint and the end of therapy. The assessment data are collected through 3 distinct source indices: 1) Subjective Index as recorded by patient counseling, family table, and self reports test. The patient request of intervention is explained through the life story, measured with standardized test and questionnaire; 2) Behavioral Index reached by observation, role playing, diary; 3) Neurophysiology Index reached by biofeedback instrumentation and qEEG recording.

Conceptualization cases and its interventions are being presented according to these three distinct sources. 1) In the Subjective Index the data is compared to normative population, being evaluated by the Schema Therapy emotional unmet need and defense modes (Young, Arntz). The family table shows the patient representation of relationships, Early Maladaptive Schemas and Modes. 2) The Behavioral Index will be described by a therapy diary and clinical observation would show behavior modification and mode flexibility. 3) The Neurophysiology Index will be measured by qEEG, neurofeedback and biofeedback. Treatment is a tailored combination of top-down as for Schema Therapy and CBT, and bottom-up as for neurofeedback and biofeedback. While the Neurophysiology index drives the neurofeedback intervention and the Subjective Index is chosen to explain and work with the cognitive parts and the schemas. The Behavioral Index would show the driving process.



JOHANNA N. RODRIGUEZ-BEATO, ISMAEL J. CASTILLO-REYES, & ESTATE SOKHADZE :POSTER SESSION

Thursday, July 28th - Continued:

7:00 PM - 8:00 PM



Poster Session: QEEG guided sLORETA Neurofeedback effects on Event-Related Potentials and cognitive performance on a stroke sufferer: A case study Presented by: Johanna N. Rodriguez-Beato, Ismael J. Castillo-Reyes, & Estate Sokhadze Affiliation: Ponce Health Sciences University & University of South Carolina School of Medicine

Room Location: VENDOR HALL

Cognitive and motor impairments are highly prevalent and persistent in stroke survivors. Network Abstract: disruptions caused by a stroke event on brain regions implicated in the different aspects of cognition can significantly impact the quality of life. Accordingly, targeting both focal cortical tissue damage and nonfocal global changes in brain function should be considered when developing therapeutic strategies to improve brain dysregulation, recovery rate, and cognitive performance of brain injury survivors. In this regard, the use of standardized Low-Resolution Electromagnetic Tomography Analysis (sLORETA) Z-Score neurofeedback (sLZNFB) is a promising approach to target dysregulation in networks on deep cortical locations. The present study aimed to explore the effects of sLZNFB on brain electrophysiology and cognitive performance for a 67-year-old male who suffered a stroke in the left hemisphere (speech difficulty and right hemiparesis were presented at intake). The study used a pre-experimental design with pre-post comparison. To this end, sLZNFB (surfaces plus coherence training) was applied to affected brain areas for 15 sessions. An Eves-open training approach was conducted as the patient showed low engagement/arousal at the initial stages of recovery. Baseline and post measurements were made on QEEG metrics, Event-related potentials at Pz (oddball paradigm), attention, memory, executive function, reaction time, and cognitive flexibility. Clinical improvements were found in attention, memory, and reaction time after 15 sessions of sLZNFB on computerized cognitive tasks. QEEG Z-score maps show positive changes on frontal high frequencies and left posterior Delta. Improvement in connectivity variables was observed across all frequencies. Greater discrimination and less latency for auditory stimulus were also found on P300 ERP component analysis at Pz after the intervention. In addition, significantly improved speech and motor function were also observed at session #8. These findings suggest the potential effectiveness of sLZNFB on cognitive performance improvement among stroke sufferers. Further studies with a larger number of patients and control groups may be required to evaluate the full potential of this type of training in stroke patients.

