



## **From Protocol Development to Conducting a Neurofeedback Session: Theory and Hands-on Practicum**

with optional 24 CE Credits available

June 7-9, 2023

Boston, MA

8:30am - 5:45pm ET

The goals of this intermediate neurofeedback course are to provide theoretical knowledge and hands-on practice for effective and ethical neurofeedback training (NTF). Throughout the course, we will focus on a proactive integrated approach to conducting a neurofeedback session, which consists of three major components: developing an individual neurofeedback protocol, conducting proactive NTF sessions, and closely monitoring their effect on the client. The importance of incorporating NTF with other treatment modalities, such as biofeedback, is also discussed.

The course explores factors that can increase effectiveness and reduce side effects. Specifically, the factors include objective assessments (e.g. as mini-maps and qEEG), subjective assessments (e.g. arousal assessment), scope of practice and experiences of the practitioner and other factors (e.g. client goals, medical and mental history).

The course includes examples, case presentations, and hands-on practicum conducting assessments as well as neurofeedback sessions. It is geared towards clinicians with introductory knowledge of NTF who are looking to further deepen their theoretical knowledge and gain more hands-on experience for a more effective treatment.

### **This course includes:**

1. Developing protocols based on minimap and PDR assessments, arousal assessment, and symptoms.
2. Working towards forward toward your BCIA certification:
  - a. Performing 3 neurofeedback sessions and conducting 1 minimap, as a clinician, for another participant. This will count as 4 client sessions and 2 mentoring hours towards your BCIA requirements.
  - b. Optional presentation of a case study. This will count as 1 case presentation and an additional 0.5 mentoring hours towards your BCIA requirements.
3. Optional 24 CE Credits through R. Cassidy
4. Optional individual brain mapping recording and analysis for a discounted cost. Additional information can be found at the end of this document.



### **Faculty**

The training is designed by and will be taught by Ainat Rogel, PhD, MSW, Diana Martinez, MD, PhD, and Leon Morales-Quezada, MD, PhD. They are MDs, PhDs and licensed clinicians with more than 15 years of experience. In addition to doing clinical work, the instructors supervise clinicians as BCIA approved supervisors), offer professional training/courses, and actively conduct research. You can read more about them at the end of this document. For their full bio's, you can find it on our website: [www.bostonneurodynamics.com/our-team](http://www.bostonneurodynamics.com/our-team)

### **Logistics**

**Date:** Wednesday, June 7 - Friday, June 9, 2023

**Time:** 8:30 am - 5:45 pm EDT

\*see [detailed agenda document](#) for daily schedule

**Location:** Hampton Inn & Suites Watertown Boston 25 Bond St, Watertown, MA 02472

**Cost:** \$1070 standard+ / \$970 early bird if paid in full by April 24, 2023

(Includes 2.5 BCIA mentoring hours, a \$462.50 value)

-10% discount for past BND training participants\*

-20% discount available if taken with the Trauma training\*

-Additional discount pricing available for participants from Latin America\*

\*only one discount can be applied

**Registration:** To register, please fill out this form <https://forms.gle/NDRTmDeCMY4PuHvz9>

**Prerequisite:** This is an intermediate neurofeedback course. A prerequisite of a BCIA approved 36-hour Introduction to Neurofeedback Didactic Training or equivalent training is required.

**Target Audience:** Neurofeedback clinicians and technicians (includes Psychologists, Psychoanalysts, Psychiatrists, Social Workers, MFTs, Counselors, Substance Abuse Counselors, Occupational Therapists, Nurses, MD, chiropractic and other degrees in healthcare that have been pre-approved by BND and BCIA)

**Contact Information:** For questions or concerns, please contact us at [info@bostonneurodynamics.com](mailto:info@bostonneurodynamics.com) / (617) 855-9295

## **Learning Objectives**

The goals of this course are to:

- A. Conduct NFB sessions as a clinician, receive NFB sessions (self), conduct and interpret minimap.
- B. Apply theoretical knowledge to develop individualized neurofeedback protocols.
- C. Demonstrate the ability to use neurofeedback equipment to successfully perform neurofeedback sessions.
- D. Design a neurofeedback protocol, determine its effectiveness, and identify any necessary adjustments.
- E. Explain the importance of a proactive approach and apply it while conducting a neurofeedback session.
- F. Incorporate neurofeedback with other neuroregulation modalities (such as biofeedback)

\*See detailed [learning objectives document](#) for daily objectives.

## **Brain Mapping**

Receiving a brain mapping at Boston NeuroDynamics is *optional for an additional cost* and can be used to guide the 10 self study sessions needed for BCIA certification. A full brain mapping provides more individualized information about the brain activity than the minimap and arousal assessment we are using in the training.

The brain mapping is a standard qEEG where we will record from both eyes open and eyes closed, analyze the data, and provide you with the results after the training. There is also the option of adding in an EPR recording (the brain's response to a cognitive stimulation) and full typed report.

The brain mapping options include:

1. qEEG only:
  - a. Can be done before, during or after the training
  - b. EEG recording (5 mins eyes open, 5 mins eyes closed) - 1 hour recording,
  - c. Neuroguide analysis and maps
  - d. 30 min review two weeks after the training to discuss the maps and determine an individualized neurofeedback protocol
  - e. Discounted cost: \$390 (regular cost is \$680)
2. qEEG & ERP:
  - a. Must be done before or after the training



- b. EEG recording (5 mins eyes open, 5 mins eyes closed) and ERP recording - 1.5 hour recording
- c. 8 questionnaires to fill out
- d. Full report (includes neuroguide analysis and maps, HBI analysis, VCPT analysis, questionnaire analysis)
- e. 60 min review two weeks after the training to discuss the maps and determine an individualized neurofeedback protocol
- f. Discounted cost: \$680 (regular cost is \$1,240)

If you are traveling, we recommend coming the day before you want to do the brain mapping record. Please let us know if you would like to schedule this ASAP as we anticipate spots filling up quickly.

### **Certification Information**

**BCIA Mentoring Hours:** The training will provide you with some of the Biofeedback Certification International Alliances (BCIA) mentoring requirements for those who want to get Board Certified. For more information about the BCIA certification, use the following link: <https://www.bcia.org/nf-entry-level>

**CE Credits:** If you are interested in the optional 24 CE credits through R. Cassidy, you can register here: <https://www.academeca.com/CEUReg/SeminarInfo.aspx?seminarId=4705>

\*More information about CE credits can be found at the end of this document.

Evaluations and Certificates are available by email and online following course completion at [www.ceuregistration.com](http://www.ceuregistration.com)

### **COVID-19 Precautions**

We will be in close contact during the training and want everyone to feel safe throughout the training. Depending on the situation in June, additional precautions (such as wearing masks) may be put in place to keep us all safe.

### **Cancellation Policy**

All payments will be fully refunded if the cancellation is made 4 weeks prior to the training, with a \$50 processing fee. Cancellations made less than 4 weeks, but more than 5 days before the



training can be refunded at 50% or fully credited towards the next workshop. Cancellations made 5 days or fewer before class cannot be refunded or credited. In the situation that you are sick or test positive for COVID-19, you can either (a) defer your tuition to attend the next training and receive a complementary 1 hour mentoring session or (b) be refunded the tuition cost minus the \$50 needed to secure the meeting space.

Boston NeuroDynamics reserves the right to cancel. Should it be necessary, we will reschedule the training for a future date. If you would like to defer your tuition to attend the next training you will receive a complementary 1 hour mentoring session, otherwise all payments will be fully refunded. We cannot be held responsible for restricted or non-refundable airfares.

Due to the uncertain nature of in-person trainings since COVID-19, we **highly recommend to make refundable / changeable travel arrangements.**

### **Disclosure Statement**

There is no conflict of interest or commercial support for this program.

\*For questions or concerns, please email us at [info@bostonneurodynamics.com](mailto:info@bostonneurodynamics.com) or call/text at (617) 855-9295

### **Faculty Bio's**

Ainat Rogel, PhD, MSW, BCN, LICSW

Ainat is the co-founder and co-director of Boston Neurodynamics where she practices neurofeedback, performs and analyzes brain mapping (qEEG) and trains and supervises neurofeedback practitioners. She currently serves as the ISNR (International Society of Neurofeedback and Research) Board of Directors Secretary. Ainat has a PhD in Computer Science and Neurobiology, a licensed independent clinical social worker, and a BCIA certified neurofeedback provider and supervisor.

Ainat advocates incorporating neurofeedback and biofeedback as part of therapy in general, and in her practice specifically focuses on developmental trauma. She also believes in fundamental and large-scale research studies. Therefore, in addition to seeing clients, Ainat gives international presentations and trainings, supervises students and conducts evidence-based research.

Ainat received her Ph.D. in Computer-Science and Neurobiology from The Hebrew University in Jerusalem, Israel, received her MSW from Simmons College in 2014 and her LICSW in 2017. She has worked in brain research at various institutions including Massachusetts Institute of Technology, the Martinos Center for Biomedical Imaging at MGH-Harvard, and Hebrew



University in Jerusalem, Israel. Since 2010, she has focused on neurofeedback research and clinical work at the Mental Health Center in Beer-Sheva, Israel and at Ben-Gurion University. Ainat also worked as a clinician and group intake coordinator at Arbour Outpatient Clinic in Jamaica Plain, Boston. She has been on the staff at the Trauma Center at JRI since 2012 as a chief scientist of neurofeedback and a senior affiliate at the neurofeedback clinic. She also trains and supervises NFB clinicians. She coordinated the child Neurofeedback Study and was part of the adult NFB study.

Ainat is fluent in English and Hebrew and uses the pronouns she/her

#### Diana Martinez, MD, MSc, PhD, BNC

Diana is the co-founder and co-director of Boston Neurodynamics where she provides neurofeedback, biofeedback and other non-invasive brain stimulation as well as offering high quality training and consulting for neurophysiological evaluations. She is a medical doctor with a specialty in Neurorehabilitation and a licensed mental health counselor, she is certified as a Neurofeedback clinician and supervisor by Biofeedback Certification Alliance.

She developed an integrative intervention to rehabilitate neurological conditions including neurofeedback and other non-invasive brain stimulation techniques. She has experience treating patients with epilepsy, learning disorders, behavioral disorder, mood disorders, sleep disorders, TBI and CP. Her doctoral thesis gave her great expertise as she studied the effect of neurofeedback in epilepsy. She has extensive experience in neurophysiology, EEG/qEEG/ERP interpretation. She is an international consultant for Neurofeedback professionals. She is a recognized instructor and lecturer in the field.

She received her medical degree from University of Aguascalientes, Mexico in 2002, Fellowship in Neurological Rehabilitation from IAHP, Philadelphia, USA in 2006; M.Sc in Neurological Rehabilitation in 2009, Fellowship in Neurophysiology from University Hospital, Cleveland, USA in 2012 and PhD from De Montfort University from Leicester, UK in 2018. She is founder of Neocemod (Neuromodulation Center), Mexico City and Aguascalientes, Mexico and was the Neurofeedback Clinical director at the Trauma Center (JRI) in Massachusetts. She was the former president of the Mexican Bio and Neurofeedback Society and currently she is part of the board of directors of the International Society of Neuro Regulation and Research.

Diana is fluent in English and Spanish and uses the pronouns she/her

#### Leon Morales-Quezada, MD

Dr. Leon Morales-Quezada is a physician-scientist with experience in neurocognitive rehabilitation, noninvasive neuromodulation, applied psychophysiology, and technology



development for neurological rehabilitation. Dr. Morales-Quezada received his MD degree from Universidad Autonoma de Aguascalientes and completed clinical training in emergency medicine and intensive care. He also completed a fellowship and Masters in Neuropsychology Rehabilitation at Touro College, a PhD in Cognitive Neurosciences from De Montfort University in Leicester UK, and a Master's in Public Health from Harvard School of Public Health.

Dr. Morales-Quezada was awarded with the prestigious Fellowship in Integrative Medicine from the Harvard-NIH program, Division of General Medicine, Beth Israel Deaconess Medical Center, and the Nacional Center for Complementary and Integrative Health. He is currently a Research Faculty from Spaulding Rehabilitation Research Institute and fellow from the Ellen R. and Melvin J. Gordon Center for the Cure and Treatment of Paralysis. Dr. Morales-Quezada research interests focus on noninvasive neuromodulation, the placebo effect, and technology development applied in rehabilitation and behavioral medicine.

Leon is fluent in English and Spanish and uses the pronouns he/his

### **Background Information**

Neurofeedback training (NFT) is a non-pharmaceutical, non-invasive, self-regulation technique in which the individual learns to alter the electrical activity of the brain. NFT can reinforce the desired activity by providing real-time positive feedback. This enables the brain to learn to regulate its activity, which can positively improve cognitive, physical, and emotional functioning.

Developing an individualized and targeted NFT protocol is a major component in the success of the NFT. While a successful protocol will improve the client's condition, the "wrong" protocol can cause negative side effects. In this course, we will dive deeper into the different components when developing an individualized protocol. Specifically, we will use data from the participants' brain mappings (if you choose to have this done), as well as research, goals, and our experience, to determine successful protocols. Throughout the three days and multiple neurofeedback sessions, we will track the effectiveness of the protocol and learn how to adjust it if needed.

Another major component of neurofeedback training is when the clinician uses a proactive approach during each session. In this course, we will learn to correlate the brain activities to the mental state of the client and practice using this approach.