

1-day Introduction to Neurofeedback

Saturday 10th November 2018

Pullman International, 17 Abbott Street, CAIRNS



Accredited Course

See page 5-6 for registration details

What is neurofeedback?

EEG biofeedback (neurofeedback) is employed to modify the electrical activity of the CNS including EEG, event related potentials, slow cortical potentials and other electrical activity either of subcortical or cortical origin. Neurofeedback is a specialized application of biofeedback of brainwave data in an operant conditioning paradigm. A wide range of studies in applied neuroscience have demonstrated the clinical effects of neurofeedback (NFB) therapy for improving electrical activity of the brain and subsequently, improving daily functioning and well-being.

Why attend this seminar?

This post-graduate level didactic seminar is a continuing professional development opportunity for health care professionals in clinical practice including, not limited to, psychology, nursing, physiotherapy, dentistry, osteopathy, occupational therapy, chiropractic, social work, speech pathology or medicine. Students and others with an interest in the brain and neuroplasticity may also participate in the workshop[#]. ([#]*When treating a medical or psychological disorder, one must carry a state issued license/credential in an approved health care field or if unlicensed, must work under appropriate supervision*).

NFB is emerging as an effective adjunct to traditional methods used in therapy for clinical health difficulties and in training toward performance enhancement. NFB may have the potential to be an alternative to conventional psycho-pharmaceutical approaches for treating neurocognitive disorders, and to enhance performance in healthy clients.

Purpose of the 1-Day Workshop

As mental health practitioners, we are very focussed on psychological processes influencing daily functioning. Neurofeedback enables both client and practitioner to have greater insight and capacity to influence the physiological processes contributing to behaviour. The seminar introduces neurofeedback, as a form of therapy – a significant therapeutic intervention for a range of disorders including attention deficit, anxiety, autism, pain, and behaviour disorders.

This workshop will:

- address behavioural symptoms and their neurophysiological attributes;
- provide an introduction to neurofeedback in the broad field of applied neuroscience; &
- introduce the concepts associated with EEG and qEEG-guided training.

About the Presenter



Michelle Aniftos BCN, MAPS, FCCLP, QEEGD, FANSA

BSSc; GradDipEd; PGDipEd; MEd; MPsych (Clinical); GradCertClinNeurophysiology

Michelle is a Clinical Psychologist and Neurotherapist, Director and clinician at 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. Michelle is a past Convener of the Australian Neurofeedback & Psychology Interest Group; current President and Fellow of the Applied Neuroscience Society of Australasia; and Immediate-past Chair of the Biofeedback Certification International Alliance - Australia. Michelle has neurofeedback certification with BCIA-Australia and is a Diplomate of the QEEG Board International.

Neurofeedback Certification

Toward BCIA-A Certification in Neurofeedback, candidates must: have pre-requisite tertiary studies in neuroanatomy and psychophysiology; successfully complete 36 hours of didactic education aligned with BCIA* [Blueprint of Knowledge](#); and successfully complete the BCIA-A entry examination. The current 1-day workshop is accredited by BCIA to meet criteria for the following sections of the BCIA Blueprint of Knowledge curriculum:

Section 1	Orientation to Neurofeedback	4hrs
Section 4	Research Evidence for Neurofeedback	2hrs

*The Biofeedback Certification International Alliance (BCIA) was created in 1981 as the Biofeedback Certification Institute of America, with the primary mission to certify individuals who meet education and training standards in biofeedback and progressively re-certify those who advance their knowledge through continuing education. To reflect our global identity, we adopted this new name in March, 2010. BCIA is an autonomous non-profit corporation whose policies and procedures are set by an independent board of directors, comprised of a rotating group of distinguished clinicians, researchers, and educators. (see <http://www.bcia.org/i4a/pages/index.cfm?pageid=3431>)

Board certification is the mark of distinction for providers of biofeedback and neurofeedback services and establishes that the individual has met entry-level education and training requirements. However, BCIA certification is not a substitute for a valid license or other credential to legally practice one's profession as regulated by health care practices in your country. In 2010, the Applied Neuroscience Society of Australasia (ANSA) agreed to the development of an independent body whose role would be to develop and oversee standards for certification within Australasia. It was also agreed that this new organization would be affiliated with The Biofeedback Certification International Alliance. In 2011, Biofeedback Certification International Alliance – Australia Inc (BCIA-A) was first registered in Australia as an affiliate of the BCIA.

Neuroscience technology is advancing to provide new insights into the workings of the brain and powerful neurofeedback applications provide direct modulation of brain states. Practitioners need to maintain their professional knowledge and skills and also must consider the ethical considerations that arise with sophisticated methods to directly modulate and measure neuronal function. There are a range of university programs for applied neuroscientific studies. Very few universities are integrating the research on EEG and its biofeedback applications. Consider NFB-relevant training, e.g., the Annual Conference & Workshops of the Applied Neuroscience Society of Australasia – being held at the **Pullman Cairns 22 – 26 August 2019**. Visit <http://appliedneuroscience.org.au/> & others <http://bio-medical.com/products/physiological-psychology-online-didactic-course.html>; | www.behavmedfoundation.org; <http://certify.bcia.org/4dcqi/store/StoreFront.html?Action=Store&>; <https://www.biosourcesoftware.com/>

Workshop Schedule

8.30 – 10.30	Orientation to Neurofeedback <i>Part 1</i> - terminology, history & development - assumptions underlying neurofeedback	2hrs
10 – 10.30	Morning refreshments break	
10.30 – 12.30	Orientation to Neurofeedback <i>Part 2</i> - human learning theory & biofeedback	2hrs
12.30 – 1.30	Lunch break	
1.30 – 2.15	Practical demonstration	45mins
2.15 – 3.15	Research Evidence for Neurofeedback <i>Part 1</i>	1hrs
3.15 – 3.45	Afternoon refreshments break	
3.45 – 4.45	Research Evidence for Neurofeedback <i>Part 2</i>	1hrs
4.45 – 5.30	Q & A, Evaluation & Close	45 mins

Recommended Workshop Reading

- [ISNR Guidelines for Neurofeedback](#) (2013)
- La Vaque, T. J., Hammond, D. C., Trudeau, D., Monastra, V., Perry, J., Lehrer, P., Matheson, D., & Sherman, R. (2002, December). [Template for developing guidelines for the evaluation of the clinical efficacy of psychophysiological evaluations](#). *Applied Psychophysiology and Biofeedback*, 27(4), 273-281.

Recommended Resources to Prepare for Board Certification in Neurofeedback

- BCIA (2014). [Blueprint of Knowledge Statements for Board Certification in Neurofeedback](#)
- Biofeedback Certification International Alliance (2009). [Professional Standards and Ethical Principles of Biofeedback](#).
- Collura, T.F. (2014). *Technical foundations of neurofeedback*. New York: Routledge.
- Demos, J. N. (2005). *Getting started with neurofeedback*. New York: W. W. Norton & Company.
- Fisch, B. J. (1999). *Fisch & Spehlmann's EEG Primer*. New York: Elsevier.
- Hammond, D. C., et al. (2011). "Standards of Practice for Neurofeedback and Neurotherapy: A Position Paper of the International Society for Neurofeedback & Research." *Journal of Neurotherapy*. 15(1): 54-64
- Schwartz, M.S. & Andrasik F. (2003). *Biofeedback: A practitioner's guide* (3rd ed.). New York: The Guilford Press.
- Soutar, R. & Longo, R. (2011). *Doing neurofeedback: An introduction*. San Rafael, CA: ISNR Research Foundation.
- Striefel, S. (2003). [Practice guidelines and standards for providers of biofeedback and applied psychophysiological services](#). Wheat Ridge, CO: AAPB.
- Thompson, M. & Thompson, L. (2003). *The neurofeedback book*. Wheat Ridge, CO: Association for Applied Psychophysiology and Biofeedback.
- Yucha, C., & Gilbert, C. (2004). [Evidence-based practice in biofeedback and neurofeedback](#). Wheat Ridge, CO: AAPB.

Introduction to Neurofeedback – Workshop Overview

Session One: Orientation to Neurofeedback Part 1

Definition of Neurofeedback (EEG Biofeedback)

Neurofeedback is employed to modify the electrical activity of the Central Nervous System including electroencephalography (EEG), event related potentials (ERPs), slow cortical potentials (SCPs) and other electrical activity either of subcortical or cortical origin. Neurofeedback is a specialized application of biofeedback of brainwave data in an operant conditioning paradigm. The method may serve as the basis for treatment of a clinical disorder or enhancement of normal functioning.

History and Development of Neurofeedback

1. Pioneers in EEG and NFB (Caton, Berger, Adrian, Kamiya, etc.)
2. Highlights of seminal studies (Serman 1968/2000, Lubar 1976, Birbaumer 1982 etc.)
3. Further developments: (Rosenfeld, Ayers, Budzynski, Peniston, Green, Kulkosky. etc.)

Assumptions underlying Neurofeedback:

1. Concepts of feedback and control in biological systems.
2. Basic psychophysiology of stress and attention

Session Two: Orientation to Neurofeedback Part 2

Overview of principles of human learning as they apply to biofeedback

1. Learning theory (e.g. habituation, classical and operant conditioning, discrimination, shaping, generalization and extinction.)
2. Application of learning principles to NFB (e.g., generalization to the life situation, discrimination training, length and number of sessions, etc.)

Session Three: Research Evidence Part 1

Practical Demonstration of QEEG/Neurofeedback set-up and application

Research Evidence for Neurofeedback Part 1

1. Interpretation of the methodological and statistical criteria and procedures for determining levels of efficacy and effectiveness of neurofeedback, as outlined in La Vaque et al., 2002.

Session Four: Research Evidence for Neurofeedback Part 2

2. Key research studies establishing current efficacy levels of major applications of Neurofeedback (e.g., ADHD, Substance Abuse, Optimal Performance, etc.)

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1. Personal Details

Surname:		Given names:	
Postal address:			
State:	Postcode:	Country: <small>(if not Australia)</small>	
Telephone:			
Home:	Work:	Mobile:	
Email:		Fax:	

2. Academic Qualifications

Please indicate your profession and/or demonstrate suitability to participate in this post-graduate professional seminar.

I have Professional Registration in the field of: _____

I have completed graduate studies in: _____

3. Course Expectations

Please provide a brief explanation of why you are interested in participating in this seminar.

Do you have any particular expectations of the program and presenter.

4. Credit Card Payment Form

Full registration will include teaching notes and e-handouts; & refreshments throughout the day.

Please register _____ (*delegate First and LAST name*) for:

1-day Introduction to Neurofeedback, 8.30am – 5.30pm Saturday 10th November 2018, at Pullman Cairns International, 17 Abbott Street, Cairns.

Payment options:

Call our offices and make a credit card payment over the phone. Your Tax Invoice can then be dispatched by email, fax or post as preferred.

Request an invoice to yourself or organisation:

Billing Name: _____

Billing Postal Address: _____

Billing Email: _____

Billing Contact Name & Phone Number: _____

Provide debit/credit card details below:

Credit Card Type: <input type="checkbox"/> Visa or <input type="checkbox"/> Mastercard or <input type="checkbox"/> _____															
Card Number:															
Expiry Date:	M	M	Y	Y											
CCV:															
Total Amount to be debited: \$ 280 (*fees include GST)															
Cardholder's Name:															
Cardholder's Signature:												Date:			

Please submit your registration by **30 October 2018** to:

Business Administrator
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Program Enquiries to Michelle Aniftos, michelle@msmh.com.au