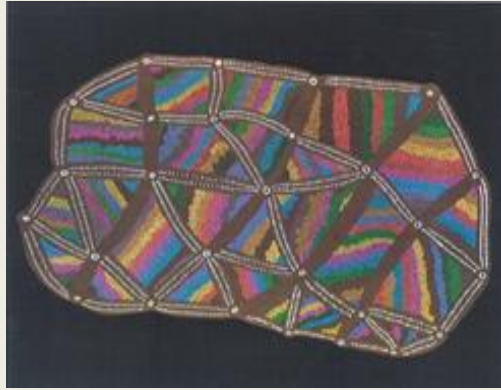


**Applied Neuroscience Society of Australasia (ANSA)**



**2011 Annual Conference and Workshops**

**NeuroCognitive Enhancement,  
Neuromodulation and Neurodiagnostics:**

**Applications for Learning, Attention, Memory  
& Self-Regulation**

**Sydney, Australia**

**12th-14th August 2011**

*SMC Conference & Function Centre  
66 Goulburn St, Sydney, Australia*



**Conference 2011 Official Sponsors:**

**Pocket Neurobics** – wireless neurofeedback trainers, since 2000  
Bruce McMillan BE. MBA. Principal, Pocket Neurobics

Solstice-Mind Matters, Brain Mind & Memory Institute [mindmatter.com.au](http://mindmatter.com.au)

## Keynote Speakers

**Dr. Lesley Sherlin, PhD-ISNR President, Chief Technical Officer of Neurotopia**

## Invited Speakers

**Dr. Adam Clarke, Wollongong University,**  
**Dr. Donna Palmer, Brain Resource Company**  
**Dr. Jacques Duff, Neurobehavioral Clinic, Melbourne**  
**Dr. Kenneth Kang, Singapore, Spectrum Learning**

**Neurofeedback Protocol Forum** Chaired by **Moshe Perl, Ph,D EEG Spectrum**

**Poster Presentations    Trade Shows    Demonstrations from Vendors**

## Sponsor Opportunities

The Applied Neuroscience Society of Australasia is a non-profit professional organisation that relies on financial support to help reach its goals and objectives in promoting the advances of neuroscience in clinical practice. Sponsors receive recognition for their contributions on the ANSA website, in printed material, and on location at supported conferences and meetings. There is also the *exhibition option* – a chance for the sponsor to showcase their organisation during the conference.

Please contact [events@appliedneuroscience.org.au](mailto:events@appliedneuroscience.org.au) for a detailed sponsorship package.

## ANSA Membership

Full, Associate, Student, memberships are available to all suitably qualified professionals.

### Benefits of membership:

Complimentary membership of ISNR, on-line access to scientific journals:

***Applied Psychophysiology and Biofeedback and Journal of Neurotherapy, Neuroconnections***

Access to My-ANSA – a professional forum for ANSA members and PsycheVisual  
Discount on conferences and workshops,  
Newsletter and on-line access to  
*Join now at [www.ansa.au.com](http://www.ansa.au.com)*



Australian Psychological Society Neurofeedback Interest group meeting 14<sup>th</sup> August

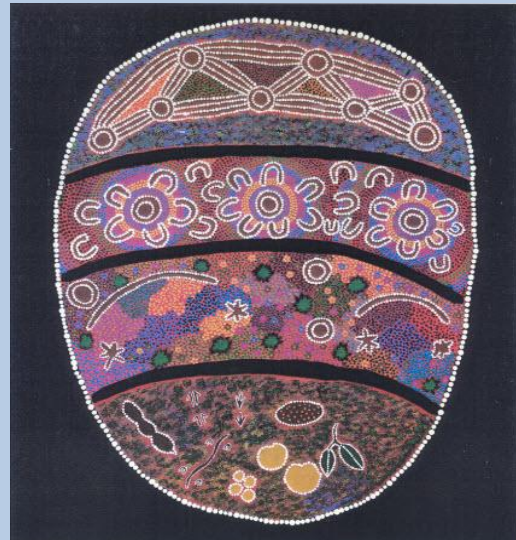
**SMC Conference & Function Centre**  
**66 Goulburn St, Sydney, Australia**

# Brain Health Expo

*An initiative of the Applied Neuroscience Society of Australasia 2011 Conference*

*August 14<sup>th</sup> 2011*

**SMC Conference & Function Centre**  
**66 Goulburn St, Sydney, Australia**



***Four Brain Story***  
**by Rachel Napaljarri Jurra - Aboriginal Artist**

The mind as divided into four domains;  
**uti** the material world, **ngura** the domain of land and territoriality, **walytja** the relationship network of kith and kin, and **tjukurpra** the domain of myth law and narrative.

Disclaimer: Use of this image is with the permission of the Aboriginal Artist Rachel Jurra and the Custodian of the painting, Dr Craig San Roque, Jungian psychoanalyst.

**See the detailed program p.4 or register at [www.appliedneuroscience.org.au/events](http://www.appliedneuroscience.org.au/events)**

# ANSA 2011 Conference Day 1

Friday August 12th, 2011

## Scientific Symposium:

### **Brain Training, Neuromodulation and Neurodiagnostics for ADHD, Learning and Developmental Disorders:**

current scientific evidence and research on neuroplasticity-based methods for neurocognitive enhancement of memory, attention, learning abilities and self-regulation

- 7:30-8:30**            **REGISTRATION**
- 8:30 -9:00**            **Official Opening President of ANSA Sue-Ellen Taylor**
- 9:00-10:00**            **Keynote Presentation Dr. Leslie Sherlin**  
**Greetings from ISNR**  
**ADHD and Neurofeedback: latest efficacy research overview**
- 10:00 – 11:00**            **Invited Speaker Dr. Adam Clarke, Wollongong University**  
**EEG anomalies in Attention-Deficit/ Hyperactivity Disorder**
- 11:00-11:15**            **Morning Tea**
- 11:15-12:15**            **Invited Speaker: Dr Kenneth Kang, Spectrum Learning, Singapore**  
**Current development of Neurofeedback in Asia and China.**  
**When Neurofeedback doesn't work as well as it should! What would you do? Natural therapies may provide some solution: hair analysis, diet, detoxification and supplements**
- 12:15 -13:00**            **Peter G. Enticott & Paul B. Fitzgerald, Monash Alfred Psychiatry Research Centre, School of Psychology and Psychiatry, Monash University and The Alfred, Melbourne,**  
**Non-invasive Brain Stimulation in Autism Spectrum Disorders**
- 13:00-14:00**            **Lunch Break**
- 14:00 -15:00**            **Invited Speaker: Dr. Jacques Duff, Neurobehavioral Clinic, Melbourne**  
**Outcomes of the large controlled study (details are coming)**
- 15:00-15:45**            **Invited Speaker: Dr Donna Palmer, Brain Resource Company**  
**Latest scientific findings from the Integrative Neuroscience Research and World Largest Brain Database**
- 15:45-16:00**            **Discussions and Afternoon tea**
- 16:00-16:45**            **Nerida Saunders, BCN, ANSA Past-President, Solstice-Mind Matters**  
**Building Core Cognitive capacity with Working Memory Training**
- 16:45-17:00**            **Discussions and Closing Remarks**
- 17:00-18:30**            **ANSA Annual General Meeting**
- 18:30-20:00**            **ANSA Committees joint planning meeting and dinner**

# ANSA 2011 Conference Day 2

Saturday August 13th, 2011

## Clinical Symposium

**Application of Brain Training, Neurodiagnostics and Neurocognitive Enhancement for ADHD, Learning and Developmental Disorders in clinical practice: Case studies, practitioner's forum**

- 7:30-8:30**      **REGISTRATION**
- 8:30-9:30**      **Invited Speaker Jay Gunkelman, QEEG Diplomat, Q-Pro worldwide**  
**Paroxysmal EEG in Learning and Pervasive Developmental Disorders**
- 09:30-10:30**    **Keynote Presentation Dr Leslie Sherlin**  
President of ISNR (International Society for Neurofeedback & Research)  
**LORETA Source Localization technique: Application and practical significance**
- 10:30-10:50**    **Discussions and Morning Tea**
- 10:50 -11:30**    **Presentation Noel Thompson, Bill Scott**  
**Improvements in the effectiveness and efficiency of Neurotherapy through the use of the Hilbert-Huang Transform in Neurodiagnostics and biofeedback practice:**
- 11:30-13:00**    **Protocol Forum Moderator Dr Moshe Perl**  
What neurofeedback protocols work for you? What protocols don't? We want to know. Come and share your experience, and listen to other folks' experiences with neurofeedback. In the process we'll have a lot of fun and pick up a few pointers from each other on becoming more successful practitioners. If there is a need for didactic pieces, they will be short. The topics we cover will depend on what you bring in. Anything in your neurofeedback world is fair game.
- 13:00-14:00**    **Lunch Break**
- 14:00-14:30**    **Practitioner Presentation: Nanette Andersen,**  
Psychologist, Sea Change Life Management  
**A case of Scenar Therapy with a pre-and post- QEEG data demonstration**
- 14:30-16:00**    **Standards for Neurofeedback and certification in Australia**  
**Panel Discussion and Practitioners Forum,**  
**Chaired by: Dr Richard Clark, Dr Leslie Sherlin**  
**Certification in Australia**-update from Dr Richard Clark,  
ANSA certification subcommittee  
II.      **ISNR Position paper on Neurofeedback standards discussions**
- 16:00-16:45**    **Invited Speaker Prof Jury Kropotov on Skype**  
**Event related potentials in schizophrenia:**  
**Implications for diagnosis and treatment**
- 16:45-17:00**    **Discussions and Questions and wrapping of the day**
- 18:00-?**        **Conference Dinner**  
**Life entertainment, traditional ANSA Auction and fund raising**

## Conference Abstracts

### **1. Adam Clarke, EEG anomalies in Attention-Deficit/Hyperactivity disorder: linking brain and behaviour.**

AD/HD is one of the most common psychiatric disorders of childhood, affecting approximately 5% of primary school children. Almost all models of the disorder accept that the behavioural cluster which is AD/HD results from an underlying central nervous system (CNS) dysfunction. However, the exact nature of this dysfunction is poorly understood. Several electrophysiological based models of AD/HD have been proposed and recent research has suggested that most are too simplistic in nature, and the underlying CNS dysfunctions are inaccurately labeled. Part of the problem results from the use of multiple bands in the analysis of the EEG, as this approach does not allow an understanding of the role of any discrete band on functioning. In a different approach, our group has been decomposing the EEG into single bands and relating anomalies in these bands to specific brain states (such as arousal), and to behavior. Results from a number of studies, and their implications for understanding the link between brain and behaviour, will be discussed.

### **2. Prof. J.D.Kropotov, Event related potentials in schizophrenia: implications for diagnosis and treatment**

#### **Event related potentials in schizophrenia: implications for diagnosis and treatment.**

*Kropotov Juri D. Director of laboratory of the Institute of the Human Brain of Russian Academy of Sciences, St. Petersburg, Russia. Professor II of Norwegian University of Science and Technology, Trondheim, Norway,*

The review of research of event related potentials (ERPs) shows that the most common scientific observation is decrease of the P3b wave both in ADHD and schizophrenia. This observation appears to reflect a common dysfunction in ADHD and schizophrenia in the parietal attention system. Dopamine hypotheses of ADHD and schizophrenia will be discussed. The hypotheses imply involvement of different aspects of information processing within the basal ganglia thalamocortical circuits. A recently emerged independent component analysis (ICA) provides a powerful tool for decomposing ERPs into components of different functional meanings. The paper will describe results of application of Independent Component Analysis (ICA) for decomposing a collection of ERPs into independent components associated with different psychological operations (such processing in dorsal and ventral visual streams, orienting response, engagement, motor suppression and conflict monitoring operations). 1000 healthy subjects, 1000 patients with ADHD and 100 patients with schizophrenia participated in this multi-center European study including laboratories from Switzerland (A. Mueller et al.), Norway (S.Hollup et al.), Macedonia (N. Pop-Jordanova et al), Russia (Kropotov et al). The results of application of the ERP ICA for diagnosis (discrimination) ADHD and schizophrenia from healthy subjects will be presented. In the final part of the paper a methodology for constructing protocols of neurofeedback and tDCS on the basis of comparison the individual ERP parameters with the normative data will be presented. Recently emerged methods of neurotherapy such as sLORETA-based, ERP-based neurofeedback and tDCS will be also introduced in relation to neuromodulation in ADHD and schizophrenia.

### **3. Dr Donna Palmer, Brain Resource Company, Latest scientific findings from the Integrative Neuroscience Research And World Largest Brain Database**

ADHD insights from the Brain Resource International Database over the past decade have lead to new products that provide personalized diagnostic decision support for ADHD and allied conditions, drawing primarily on profiles of emotional functioning and cognitive performance. An overview of these insights and product tools will be provided here, as well as our ongoing extension of this program of ADHD research, which is focused on EEG & arousal biomarkers in clinical subgroups. This extension addresses the key question of *mechanism* and meaningful biological subgroups within ADHD and allied disorders, and the way in which these relate to treatment options and functional outcomes - with a view to identifying the most beneficial treatment approach for each individual child. In addition, an overview of a related new international study on the efficacy of Neurofeedback in ADHD, *INSENTA*, will also be presented.

**4. Bill Scott, Noel Thompson, Improvements in the effectiveness and efficiency of Neurotherapy through the use of the Hilbert-Huang Transform in Neurodiagnostics and biofeedback practice:**

In the last five years, there have been two very important breakthroughs in our understanding of EEG signals with implications for Neurodiagnostics and neurotherapy practice.

The first of these is the work of Robert T. Knight, and his group at Stanford, that have shown the importance of high gamma signals through their work on intracranial electrocorticography. These workers have also shown phase amplitude coupling between high gamma, and alpha, in visual processing.

The second is the work of Ali Mazaheri and Ole Jensen on the visual word processing area, and mismatch negativity. This work has shown clear diagnostic differences between ADHD and non ADHD subjects, in the control of attention and Alpha and Theta amplitude before and after mistakes.

Unfortunately, normal EEG signals greatly suppress high gamma relative to intracortical (brain surface) signals. The low amplitude of high gamma in normal EEG is the single greatest restriction to the use of this new knowledge in neurotherapy practice.

We have now demonstrated that to some extent the low amplitude problem can be overcome by the use of the Hilbert-Huang Transform (HHT), instead of conventional EEG frequency decomposition. We have demonstrated that phase amplitude coupling is observable using the normal EEG signals. We have also shown improved efficiency in treatment when biofeedback is based on the HHT signal decomposition. Although this work is in its infancy, it has very high promise, particularly in areas relating to reading disability, but probably in all areas of neurotherapy.

**5. Keynote Presentation Dr Leslie Sherlin**

**"ADHD and Neurofeedback: efficacy research, current studies and future implications"**

Learning theory principles that contribute to details of application for the most effective neurofeedback training program will be presented. It has been established that many learning theory principles (classical conditioning, shaping, generalization, etc) are involved in the application known as neurofeedback. This talk is aimed to elaborate on the learning theory principles involved in the effective application of neurofeedback. Additionally, this talk provides the current evidence supporting the use of neurofeedback in the treatment of ADHD and recommendations on the implementation of neurofeedback in clinical practice. The talk is based upon the recent Position Paper on Neurofeedback for the Treatment of ADHD (Sherlin, Arns, Lubar & Sokhadze, 2010) adopted by the ISNR and also provides basic information regarding the diagnosis and psychophysiological etiology of ADHD. The purpose is to demonstrate the rationale and to reference the necessary support for neurofeedback in order to be recognized as a legitimate, scientific, and evidence-based intervention for the treatment of ADHD.

Sherlin, L, Arns, M, Lubar, J and Sokhadze, E. (2010). 'A Position Paper on Neurofeedback for the Treatment of ADHD', Journal of Neurotherapy, 14: 2, 66 – 78

**6. Peter G. Enticott & Paul B. Fitzgerald, Monash Alfred Psychiatry Research Centre, School of Psychology and Psychiatry, Monash University and The Alfred, Melbourne, Australia**

**Non-invasive Brain Stimulation in Autism Spectrum Disorders**

Autism spectrum disorders (ASD) are a group of neurodevelopmental conditions that are characterised by social, communicative, and behavioural impairments. Although the neurobiological basis of ASD is becoming clearer, there are currently no validated biomedical treatments targeting the core symptoms. Recent developments in non-invasive brain stimulation, however, have provided important insights into possible underlying neural mechanisms and the development of potential new treatments. Our current research, which involves repetitive transcranial magnetic stimulation (rTMS) and transcranial direct current stimulation (tDCS), indicates that non-invasive brain stimulation in ASD can lead to significant improvements in both neurophysiological indicators and clinical presentation.

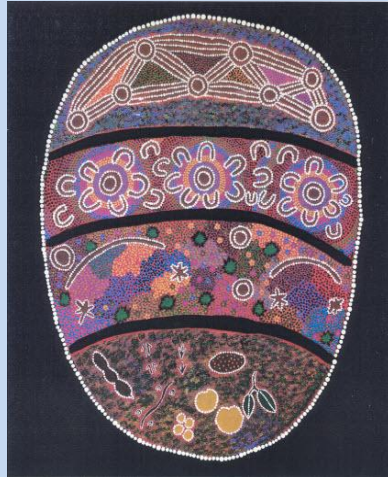
This research enhances our neurobiological understanding of ASD and is a promising development in the search for new therapeutic interventions for these conditions.

More abstracts to come

# Brain Health Expo

*An initiative of the Applied Neuroscience Society of Australasia 2011 Conference*

*Four Brain Story  
by Rachel Napaljarri Jurra-Aboriginal Artist*



The **2011 ANSA Conference** brings together leading experts in Brain Health and Neurotechnologies from across Australia and overseas. We will be opening our doors on Sunday 14 August so that our brain experts can share their knowledge with the Australian public, carers and professionals. We invite everyone interested in Brain Health and Fitness to come to our Brain Health Expo and learn how to get the very best out of their brain!

Our brain is our most precious asset. We are faced as never before with the life-long challenge of nurturing and developing our mental talents and abilities so that we can perform at our best. Fortunately, current research pointing to our brain's ability to remodel itself (Neuroplasticity) means that this is an achievable goal for everyone. Our experts will provide you with the most up to date information available on how to improve your brain and thrive in the 21<sup>st</sup> Century.

Topics covered will include how you can improve your memory, attention, learning, organisational and self-regulation skills. From peak performance to healing brain injury, ADHD, ASD, Learning Difficulties, epilepsy and many different brain conditions, there will be something of interest to everyone.

To register go to at [www.appliedneuroscience.org.au/events](http://www.appliedneuroscience.org.au/events)

Or call us on 07 5599 2220

# Brain Health Expo Program

## Our Presenters:

**Dr. Leslie Sherlin**- *President of the International Society for Neurofeedback & Research*

**Dr Jacques Duff**- *ADHD Expert and the founder of the Behavioral Neurotherapy Clinic in Melbourne*

**Dr Kenneth Kang**, *Spectrum Learning, Singapore*

**Ms Nerida Saunders**, *Clinical Director of Solstice-Mind Matters, Brain Mind & Memory*

**Dr. Leon Petchkovsky**: *Psychiatrist,*

**Dr. Moshe Perl**

## Topics:

### **Optimizing the Brain's Performance**

By Dr. Leslie Sherlin will give basic introduction to QEEG –brain diagnostics and Neurofeedback for ‘healthy’ individuals as well as those with symptoms and illustrate using many or professional athletes. Presentation will have lots of videos. Suitable for the general public and beginners professionals

**Working Memory Training:** *building the core cognitive capacity as prerequisite for academic success and remediation of attention deficits: by Nerida Saunders*

### **Brain Health and Guts**

**Neurofeedback Therapy:** comprehensive overview how it works

**Brain Diagnostics**-A Window into the Brain

**Brain-Based Interventions for ADHD, Autism and Learning Disorders**

**The Neurobiology of Mindfulness:** *regenerate your brain*

**Brain Fitness and Neurocognitive Enhancement:** overview of main products on the market and practical considerations

**ANSA committees joint meeting and dinner on**

**Friday, 11th of August**

**After the Workshop**

**From 17:00-19:00+**

## Conference 2011 Workshops

### **“Quantitative EEG Techniques, LORETA and Neurophysiological Symptom Integration for Assessment and Neurofeedback”**

**4-days workshop with Dr. Leslie Sherlin, PhD, QEEGD, BCN, BCB**



**Part A:** Wednesday 10th –Thursday 11th August, 2011

**Part B:** Monday 15<sup>th</sup> – Tuesday 16<sup>th</sup> August, 2011

A 4 day, 36 hour workshop for biofeedback/neurofeedback practitioners, psychologists, clinical counsellors, clinical social workers, marriage and family therapists, nurses, physicians, and other health care professionals with an interest in electroencephalography, quantitative analysis techniques, QEEG patterns of psychopathology, neurophysiological symptom integration for treatment planning and EEG operant conditioning.

#### **About Presenter**

Leslie is certified at the diplomat level in quantitative electroencephalography and is board certified in both Biofeedback and Neurofeedback by BCIA. Additionally he has expertise in a wide variety of software applications for EEG acquisition, QEEG analysis, LORETA and bio or neurofeedback interventions.

Dr. Sherlin is an approved BCIA mentor. More information about Leslie Sherlin please visit [www.appliedneuroscience.org.au/Dr.LeslieSherlin](http://www.appliedneuroscience.org.au/Dr.LeslieSherlin)

#### **Course Description**

The following content will be adapted according to the experience and knowledge of the group. The workshop focuses on multiple aspects of utilizing electroencephalography (EEG) for assessment and therapy. The technological advances in the field of human brain mapping as well as biofeedback have amalgamated to provide vast opportunities for the mental health provider to capitalize on increased efficacy in assessment and intervention.

The course will open with a brief refresher on the basic neuroanatomy and gross functions of the structures of the brain involved in the regulation of psychophysiology. This will lead into a fundamental presentation on the generation of the electrical activity of the brain in a comprehensible manner. Together this information will provide the groundwork for advanced thought in neurophysiological symptom integration with QEEG assessment.

The program will illuminate the techniques and applications of quantitative electroencephalography (QEEG) analysis such as continuous EEG spectral analysis, normative/reference population comparisons, independent component analysis (ICA), and low-resolution electromagnetic brain tomography (LORETA). These techniques will be explained both in definition as well as implementation leaving the attendee with a clear understanding of the utility and the applicability of each method. The aforementioned concepts will provide a straightforward approach to interpreting and implementing QEEG information in the development of protocols for intervention.

Days three and four of the workshop will have special emphasis on LORETA techniques beginning with an introduction to the theory and analysis and moving to an exploration of the LORETA literature and findings to date. Interpretation of data and protocol selection will follow including practical hands-on experience with conducting LORETTA neurofeedback sessions.

The concepts will be delivered through both didactic and case presentation with audience participation in a casual and experiential format.

# Workshop Schedule

## Wednesday August 10, 2011 (DAY 1)

8:30 – 9:00 Sign in/coffee  
9:00 – 9:30 Introductions and orientation  
9:30 – 12:00 Lecture – Leslie Sherlin, Ph.D.

**Basic Neuroanatomy and gross functions of the structures of the brain involved in the regulation of psychophysiology. Fundamentals in the generation of the electrical activity of the brain**

12:00 – 1:00 Lunch  
1:15 – 5:00 EEG Recording Lab

1:15 – 3:00 EEG Recording  
3:00 – 5:00 EEG Editing / Analysis

## Thursday August 11, 2011 (DAY 2)

8:30 – 9:00 Review of day 1 lecture – Q&A  
9:00 – 12:00 Lecture – Leslie Sherlin, Ph.D.

**Techniques and applications of QEEG: continuous EEG spectral analysis and reference population comparisons. An approach to interpreting and implementing QEEG information based on QEEG analysis, symptom integration and established EEG operant conditioning research**

12:00 – 1:00 Lunch  
1:15 – 3:00 EEG Recording  
3:00 – 5:00 EEG Editing / Analysis

## Monday August 15, 2011 (DAY 3)

8:30 – 9:00 Review of day 2 lecture – Q&A  
9:00 – 12:00 Lecture – Leslie Sherlin, Ph.D.

**Introduction to LORETA theory and analysis Application of LORETA literature review and interpretation technique**

12:00– 1:00 Lunches  
1:15 – 3:00 EEG Editing  
3:00 – 5:00 LORETA Analysis

## Tuesday August 16, 2011 (DAY 4)

8:30 – 9:00 Review of day 3 lecture – Q&A  
9:00 – 12:00 Lecture – Leslie Sherlin, Ph.D.

**sLORETA feedback studies: preliminary findings, Development of sLORETA intervention protocols  
Practical implementation of sLORETA feedback**

12:00 – 1:00 Lunch  
13:15 – 17:00 sLORETA feedback protocol design and implementation

Please register at: [www.appliedneuroscience.org.au/events](http://www.appliedneuroscience.org.au/events)

### Workshop prices:

ANSA Member Conference workshop early bird (until July 15<sup>th</sup> 2011) \$850  
ANSA Member standard Registration (starts on July 16th 2011) \$1,050.00  
ANSA Member Special Conference & Workshop package (7 days) \$1300  
Non-Member Early Bird Registration (until July 15 2011) \$950.00  
Non-Member Standard Registration (starts on July 16 2011) \$1,150.00

**To become a member of ANSA and save on conferences and workshops + receive other member benefits please apply at [www.appliedneuroscience.org.au](http://www.appliedneuroscience.org.au)**

# Introduction to Neurofeedback for Beginners

**Dr Kenneth Kang**

8:00 Registration

8:30 What is Neurofeedback?

b. Demonstration of neurofeedback

c. A brief history of neurofeedback

d. Brief scientific review (I will cover along the lines of my work – learning and developmental disorders)

e. Demo of neurofeedback – participants to come up and try

12:00 Lunch Break

f. Factors affecting the efficacy of neurofeedback

- Exposure to toxic elements, introducing the use of HTMA
- Diet and allergies, introducing blood test for food allergies
- Gut conditions, introducing organic acid tests using urine

g. Introduction to QEEG

h. Questions and answers

The ideal timing will be about three hours for a. to e. (morning), and f. to h. (afternoon). The flow may of the content may change.

**About Kenneth Kang:** Dr Kenneth Kang, PhD., is the first Neurofeedback practitioner in Singapore, specialising in learning and developmental disorders in children, including ADHD, Dyslexia, and Autism. He successfully incorporates in his work nutritional intervention and detoxification in cases when Neurofeedback is not as effective as expected. He is an educational psychologist by training. He has taught in a local school in Singapore for many years prior to setting up Spectrum Learning in 1995. **Spectrum Learning** provides a holistic neurofeedback therapy for children with learning and developmental disorders. Over the years, Kenneth Kang has incorporated natural therapies involving the use of supplements, diet and detoxification methods to improve the efficacy of his neurofeedback therapy. The long establishment of the company is testimony of the success with clients using Spectrum Learning's methodologies. According to Dr. Kenneth Kang one of the key pillars in his work with children with learning and developmental disorders is the use of hair analysis as a tool to investigate the exposure to toxic elements and nutritional milieu of children. He found that exposure to toxic elements such as Mercury and Lead is real and alive in the South East Asian region. He also found that nutritional imbalances are also prevalent, especially among children with learning and developmental disorders. Detoxification and nutritional supplements are crucial to help these children and these also help to improve the efficacy of neurofeedback therapy. Kenneth Kang provides consultancy for hair tissue mineral analysis to other clinics in the region. Kenneth Kang also routinely order an Organic Acid Test (OAT) and food allergies test (IgE and IgG) to further assess the client's biochemistry when necessary. The OAT can reveal if there are yeast/fungal and/or bacteria over-growth, acidity due to oxalates, peptide digestive problems and etc. Food allergies are also very common among children with special needs. He is also a pioneer in offering QEEG assessment or Brain Mapping to assess brain function and use it as a basis to recommend neurofeedback protocols. He has developed a proprietary Brain Mapping assessment which analyses how a person utilizes his/her brain while on specific tasks and also identifies differential maturity between specific regions of the brain. Kenneth Kang/SL is involved in collaborative research with universities in the region.

Workshop fees

**ANSA Member early bird** \$ 160. through 15 Jul 2011 (30 day(s) before event)

**ANSA Member standard fee** \$200.00 starts on 16 Jul 2011 (29 day(s) before event)

**ANSA student member rate** \$90.00

**Non member workshop attendee standard** **\$220.00** Public access

**Non- member workshop attendee early bird** **\$190.00** through 15 Jul 2011 (30 day(s) before event)

**Student non-member** **\$140.00** Public access

## ANSA Conference 2011 Registration and Fees

We urge people to pre-register online at [www.appliedneuroscience.org.au/events](http://www.appliedneuroscience.org.au/events) with debit/credit cards.

You may also register by mail (send to Events, 36 Beryl St, Tweed Heads, NSW, 2485)

or by faxing registration to 0755992221. Or email to [events@appliedneuroscience.org.au](mailto:events@appliedneuroscience.org.au)

Faxed registration forms must have credit card information to be processed. Please DO NOT fax and then mail the same registration form. On-site registration is available, but may be limited. *All checks sent as payment must have registrants' names associated with them.*

First Name Last Name Credentials

Organization

Address

City State/Province Zip Country

Phone Fax E-mail

Conference Total \$ \_\_\_\_\_

Join ANSA Now! Membership Total \$ \_\_\_\_\_ **GRAND TOTAL** \$ \_\_\_\_\_

My check is enclosed. (Payable to ANSA)

Charge my credit card:

Card No. \_\_\_\_\_ Exp. Date \_\_\_\_\_

Signature \_\_\_\_\_

Cancellation Policy: Cancellations must be received in writing at the ANSA event management office no later than 30 July, 2011 in order to refund the registration fee minus a \$25.00 administration fee. Registrants who do not attend are liable for the registration fee. ANSA has the right to cancel these trainings and will make a full refund of the registration fee.

Conference Etiquette: It is difficult to maintain room temperatures that are comfortable for all conference participants. A light sweater or jacket is helpful when room temperatures become too cool. Participants are asked to turn off cell phones and beepers when attending workshops, or to change them to a silent signal if necessary. Please step outside of the room when responding to a page or call.

### Please tick and underline your selection

#### Conference and Brain Health Expo

All prices are in Australian dollars\$\$

ANSA Members Early Bird registration \$580.00 through 15 Jul 2011

ANSA Member Standard Registration \$660.00 starts on 16 Jul 2011

Conference Speaker full conference attendance \$400.00

Daily Conference Registration \$250.00 Public access

Member's Special Conference & Workshop package \$1,300.00

Student registration 450.00

ANSA Conference Registration Non-Member Early bird \$650.00 through 15 Jul 2011 (28

ANSA Conference Registration Non-Member Standard \$700.00 Public access + starts on 16 Jul 2011 (27

ANSA Conference and Workshop Package for non-members 1,450.00 Public access

#### Workshops prices:

#### **“Quantitative EEG Techniques, LORETA and Neurophysiological Symptom Integration For Assessment and Neurofeedback”**

4-days workshop with Dr. Leslie Sherlin, PhD, QEEGD, BCN, BCB

ANSA Member Conference workshop early bird (until July 15<sup>th</sup> 2011) \$850

ANSA Member standard Registration (starts on July 16<sup>th</sup> 2011) \$1,050.00

ANSA Member Special Conference & Workshop package (7 days) \$1300

Non-Member Early Bird Registration (until July 15 2011) \$950.00

Non-Member Standard Registration (starts on July 16 2011) \$1,150.00

Student Registration \$140

#### **Join ANSA and save on conference registration and ANSA membership (through June 30, 2012)**

Membership levels:

Associate membership \$200.00 (no approval required)

Corporate membership (\$1,000.00 (AUD

Full membership \$200.0 (conditions applied)

Student membership (\$100.00)

**See ANSA membership benefits on the next page**

Applied Neuroscience Society of Australasia

2011 Annual Conference and Workshops

**NeuroCognitive Enhancement, Neuromodulation and Neurodiagnostics:**

**Applications for Learning, Attention, Memory & Self-Regulation**

## ANSA Membership Benefits-excellent value

Discount on conferences and workshops

ANSA Newsletter and News update

ANSA members listserve at Yahoo groups

ANSA membership directory

Complimentary Membership of the International Society for Neurofeedback & Research



Including:

**On-line access to all issues of ISNR Journal of Neurotherapy and Neuroconnections Newsletter**

**ISNR members listserve: a wealth of information on Neurofeedback + support for practitioners of neurotherapy**

**On-line access to all issues of**

**the Association for Applied Psychophysiology and Biofeedback journals including:**

***Applied Psychophysiology and Biofeedback and***

***Biofeedback Clinical Journal***



**Psyche Visual on-line videos:**



## Venue Information



**website:** <http://www.smcfc.com.au/about-our-conference-centre/>

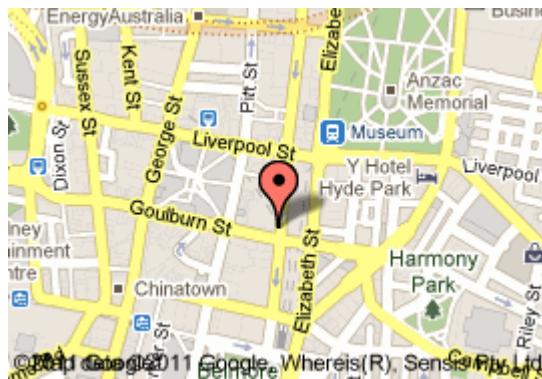
66 Goulburn Street. The Centre is a short stroll from both Museum and Central Stations. Parking can be found at the Wilson Parking Station diagonally opposite the building. Museum station is the closest train station. Take the Castlereagh St. exit from Museum station, then turn left heading south down Castlereagh St. At the first intersection (Castlereagh & Goulburn St.) turn right heading west down Goulburn St. 20 metres to the entrance of SMC Conference & Function Centre

### **Parking:Goulburn Street Parking Station:**

Cnr Goulburn & Elizabeth Streets, Sydney

Phone 1800 PARKING (1800 727 5464)

<http://www.wilsonparking.com.au/go/wilson-car-parks/nsw/goulburn-street-parking-station>



## Accommodation

**for all accommodation bookings and inquiries please email [events@appliedneuroscience.org.au](mailto:events@appliedneuroscience.org.au)**

**NB! Due to Sydney City to Surf event on the weekend of 13-14th of August accommodation in the proximity to the conference venue will be limited. Please make sure to book in advance.**

**ANSA event management team has secured a limited number of rooms at special rates**