

Applied Neuroscience Society of Australasia (ANSA)



2011 Annual Conference and Workshop

**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

Solstice-Mind Matters, Brain Mind & Memory Institute

www.mindmatters.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

Nerida Saunders, BCN, Solstice-Mind Matters

Neurofeedback Protocol Forum - Chaired by Dr Moshe Perl, 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 for a detailed sponsorship package.

ANSA Membership

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

Benefits of membership:

- Complimentary membership of ISNR
- On-line access to scientific journals such as *Applied Psychophysiology and Biofeedback*; *Journal of Neurotherapy and Neuroconnections*
- Access to My-ANSA – a professional forum for ANSA members - and PsycheVisual
- Discount on conferences and workshops.

Newsletter and on-line access:
Join now at www.ansa.au.com



Australian Psychological Society Neurofeedback
Interest group meeting, 14th 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 14th 2011

SMC Conference & Function Centre

66 Goulburn St, Sydney, Australia

See the detailed program (p.4) or register at
www.appliedneuroscience.org.au/events

ANSA Management Committee

Meeting and dinner

Friday, 11th of August after the Leslie Sherlin's Workshop

From 17:00-19:00+

Only Management Committee members please

Conference Workshops

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

4-days workshop with Dr. Leslie Sherlin, PhD

Part A August 10-11

Hands-on training on using quantitative electroencephalography for brain diagnostics

Part B August 15-16

LORETA diagnostics and LORETA Neurofeedback

Introduction to Neurofeedback for Beginners, Dr Kenneth Kang

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, *MAPS, MECNS, PhD, Director of Behavioural Neurotherapy Clinic***
Biological underpinnings of ADHD, Depression and Anxiety
- 15:00-15:45** **Certification in Australia- *update from Dr Richard Clark***
ANSA certification subcommittee
- 15:45-16:00** **Discussions and Afternoon tea**
- 16:00-18:45** **ANSA Annual General Meeting**
- 19:00-20:00** **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:

Presentations, case studies, practitioner's forums

- 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
- 14:30-15:10** **Invited Speaker: Dr Donna Palmer, Brain Resource Company**
Latest scientific findings from the Integrative Neuroscience Research and World Largest Brain Database
- 15:10-15:45** **Panel Discussion and Practitioners Forum**
Chaired by: Dr Richard Clark, Dr Leslie Sherlin
Standards for Neurofeedback:
ISNR Position paper on Neurofeedback standards
- 15:45-16:00** **Discussions and afternoon tea**
- 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, Questions and wrapping up of the day**
- 18:00-late** **Conference Dinner**
Live 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, 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

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

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), and 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 characterized 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.

7. **Dr. Jacques Duff**, *B.A., Grad. Dip. Psych., PhD., MAPS., MECNS., AMACNEM., FANSA. Neuroscientist, Psychologist and Nutritionist*

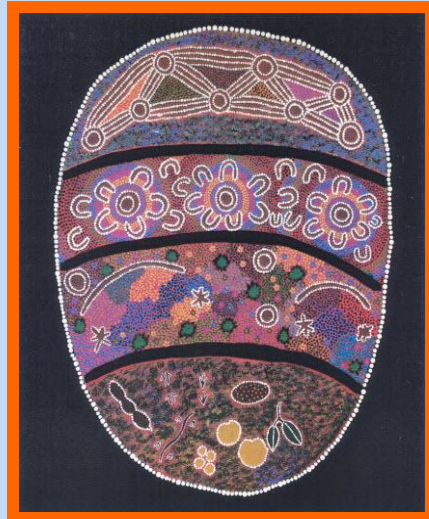
ADHD, Depression and Anxiety: Identifying the Neurobiological underpinnings.

This presentation address will relate research findings from various disciplines to help understand and identify the many possible causal factors for ADHD, Depression and Anxiety, hopefully leading to more effective treatment.

- How biological drives and environmental factors engender core belief systems.
- Brainstem neuromodulators and neurotransmitter systems involved
- Why 70-90% of patients with IBS also experience anxiety, panic and depression.
- Genes and Single Nucleotide Polymorphisms (SNPs).
- How some SNPs affect mental health.
- Nutrigenomics: Nutrient and SNPs interactions.
- How nutrient deficiencies affect mental health.
- QEEG power, asymmetry and coherence underpinnings.
- Effectiveness of symptom based Psychiatric treatment versus QEEG based.
- Post Concussion Syndrome masquerading as Anxiety, ADHD and Depression.
- QEEG as an adjunct in differential diagnosis.
- Multidisciplinary approach more effective than single paradigm.

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. Doors will open at 10:00am on Sunday 14 August and our brain experts will share their knowledge. This Expo will appeal to members of the public, carers and professionals alike. It is an enjoyable event, so if you are interested in Brain Health and Fitness, be sure to come to our Brain Health Expo and learn how to get the very best out of your brain.

In truth, our brain is our most precious asset. We are all 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, this is an achievable goal for everyone, as demonstrated by current research in Neuroplasticity (i.e. our brain's ability to remodel itself). Our experts will provide you with the most up to date information available on how to improve your brain and thrive in the 21st Century.

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

To Register now, call us on 07 5599 2200, or online at:

appliedneuroscience.org.au/events

Your Brain Matters!

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*

Dr. Moshe Perl, *One of Australian most experienced Neurofeedback experts*

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

Dr. Leon Petchkovsky: *Psychiatrist, Associate Professor, Jungian Psychoanalyst, Pinniger Clinic*

Topics

Optimizing the Brain's Performance, Dr. Leslie Sherlin

A 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

Brain Health and the Gut, Dr. Jacques Duff

Recent research suggests that intestinal bacteria have an indirect but observable effect on human stress-related anxiety responses, the general health of nerve and muscle cells, and ultimately brain development.

Working Memory Training, Nerida Saunders

Building the core cognitive capacity as a prerequisite for academic success, and remediation of Attention Deficits.

Neurofeedback Therapy

Neurofeedback is a conceptually simple and elegant method of training the brain to improve its efficiency.

Brain Diagnostics

You will learn about the different ways in which brain wave profiles can begin to be interpreted and understood by everyone.

Brain-Based Interventions for ADHD, Autism and Learning Disorders

A range of interventions will be discussed, with specific examples arising from your input during the Expo

The Neurobiology of Mindfulness, Dr. Leon Petchkovsky

The capacity to track inner experience is severely damaged in people who had bad early nurturing (Reactive Attachment Disorder). Most meditation systems train mindfulness by beginning with concentration exercises (like tracking the breath...) which then allows the trainee to bring a sharper awareness to other experiences. A range of reports suggest that, for damaged students, a lot of emotional support and "loving kindness" training is needed to supplement Mindfulness Training.

Recent brain imaging studies suggest that the brain pathways which we use for mindfulness practices are the same pathways used for empathy. In short: If you can track yourself well, then you can track others well, and vice versa.

This presentation will review recent neurological advances in our understanding of mindfulness and empathy.

Brain Fitness and Neurocognitive Enhancement

An overview of the main commercial products available, as well as practical considerations in the choice and use of various systems.

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 15th – Tuesday 16th 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. For more information about Leslie Sherlin please visit 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.

Venue:

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

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 Lunch
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

Workshop prices:

ANSA Member Conference workshop 4 days
ANSA Member standard Registration
ANSA Member Special Conference & Workshop package
Non-Member Standard Registration One Day fee:
Student fee: \$140 per day or \$400 all 4 days

To become a member of ANSA and save on conferences and workshops + receive other member benefits please apply at www.appliedneuroscience.org.au

ANSA Conference 2011 Registration and Fees

Register online at: www.appliedneuroscienc.org.au/events
Register by mail: Events, 36 Beryl St, Tweed Heads, NSW, 2485
Register by email: events@appliedneuroscience.org.au
Register by Fax: 0755992221

NOTE: 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.

Please tick your selection

All prices are in Australian dollars (AUD \$)

Conference and Brain Health Expo

- | | | |
|--------------------------|---|---------|
| <input type="checkbox"/> | ANSA Member Standard Conference Registration | \$580 |
| <input type="checkbox"/> | Non-Member Standard Conference Registration | \$650 |
| <input type="checkbox"/> | Student Standard Conference Registration | \$450 |
| <input type="checkbox"/> | Conference Speaker full conference attendance | \$400 |
| <input type="checkbox"/> | Daily Conference Registration | \$250 |
| <input type="checkbox"/> | ANSA Member Conference & Workshop package | \$1,300 |
| <input type="checkbox"/> | Non-Member Conference and Workshop Package | \$1,450 |

Conference Total \$ _____

Leslie Sherlin Workshop

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

PART A QEEG (10th & 11th August)

- | | | |
|--------------------------|-----------------------------------|-------|
| <input type="checkbox"/> | ANSA Member standard Registration | \$450 |
| <input type="checkbox"/> | Non-Member Standard Registration | \$500 |
| <input type="checkbox"/> | Daily Registration | \$280 |
| <input type="checkbox"/> | Student Registration | \$200 |
| <input type="checkbox"/> | Student Daily Registration | \$140 |

PART B LORETA (15th & 16th August)

- | | | |
|--------------------------|-----------------------------------|-------|
| <input type="checkbox"/> | ANSA Member standard Registration | \$450 |
| <input type="checkbox"/> | Non-Member Standard Registration | \$500 |
| <input type="checkbox"/> | Daily Registration | \$280 |
| <input type="checkbox"/> | Student Registration | \$200 |
| <input type="checkbox"/> | Student Daily Registration | \$140 |

Workshop Total \$ _____

Grand Total \$ _____

First Name, Last Name & Credentials: _____

Organization: _____

Address: _____

City, State/Province, Zip, Country: _____

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.

Applied Neuroscience Society of Australasia 2011 Annual Conference and Workshops
NeuroCognitive Enhancement, Neuromodulation and Neurodiagnostics:
Applications for Learning, Attention, Memory & Self-Regulation

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



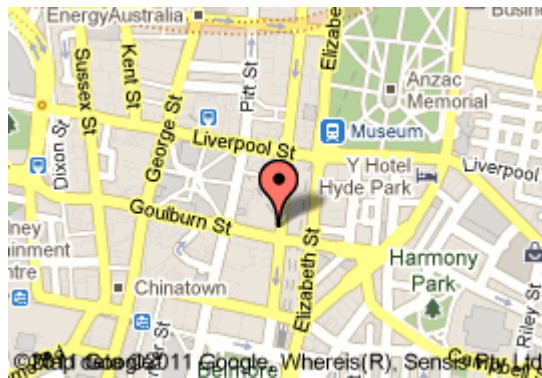
website: <http://www.smcfc.com.au/about-our-conference-centre/>

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

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