

## FROM THE EDITOR

# Advances in the Use of Biofeedback and Neurofeedback with Post Traumatic Stress Disorder, Part II

Editor in Chief: Donald Moss, PhD

The cover of this issue shows refugees from Darfur fleeing across a swollen river to safety in neighboring Chad. Our thanks to photographer Ryan Spencer Reed, whose photographic impressions of the suffering in Sudan can be seen at <http://sudanproject.ryanspencerreed.com/>. This second successive special issue on post traumatic stress disorder is dedicated to the hundreds of thousands of human beings affected each month by warfare, persecution, and torture.

### Professional Issues

Fred Shaffer and Judy Crawford provide a second article in a Biofeedback Certification Institute of America series, which pays tribute to “educators who have made a difference” in improving the credibility of biofeedback practitioners, protecting the welfare of biofeedback consumers, and advancing the biofeedback field.

Timothy Harkness reports on his use of biofeedback and neurofeedback in sports psychophysiological interventions with Abhinav Bindra, who won a gold medal in the air rifle event for India at the Beijing Olympics.

### Special Issue Articles: Advances in the Use of Biofeedback and Neurofeedback with Post Traumatic Stress Disorder, Part II

The special issue on post traumatic stress disorder (PTSD) opens with a report from the professional staff of the “Service for the Treatment and Rehabilitation of Torture and Trauma Survivors” (STARTTS), in New South Wales, Australia. Jorge Aroche, Sejila Tukelija, and Mirjana Askovic are themselves survivors of the conflicts in Kosovo, and now serve survivors of trauma and torture who have resettled to Australia, a major resettlement destination for refugees. STARTTS provided services in 2008 to 6,182 individuals from 86 different ethnic groups speaking 102 different languages. Since 2004, STARTTS has integrated neurofeedback into the psychotherapy provided to individuals with PTSD.

A second article from STARTTS, authored by Mirjana Askovic and Deborah Gould, describes the STARTTS treatment approach and provides a case study of a 14 year old boy from Sierra Leone, Ismat, who was assessed using quantitative electroencephalography and psychological

testing, and treated with a combination of psychotherapy and neurofeedback.

One of the priorities in American trauma work today involves the military personnel serving in Iraq and Afghanistan. Maureen Haney describes a resilience training program that she developed for Army ROTC Cadets at California State University at Fullerton. The Cadets receive the resilience training both prior to and following deployment in Iraq. The six week training program includes a psychophysiological stress profile repeated in weeks one and six, the assessment of each Cadet’s resonance frequency, and twice daily breath training at the individual’s resonance frequency. The program also includes autogenic training.

Jonathan Walker reports on the use of quantitative electroencephalography (QEEG) both to assist in the assessment of individuals with post traumatic stress disorder, and in guiding neurofeedback treatment to remediate the anxiety. He describes a series of 19 individuals with PTSD who were treated with QEEG guided neurofeedback.

### Feature Article

Rob Coben provides a discussion of the use of electroencephalography (EEG) to aid in the assessment of autism and autistic spectrum disorders. Coben identifies neural connectivity problems in the brains of many with autism. These connectivity problems can be detected by EEG, and can to some degree be remediated by neurofeedback training.

### Book Review

Roger deBeus reviews the *Handbook of Neurofeedback* (Haworth, 2007) authored by James Evans. The Evans’ *Handbook* provides a comprehensive overview of the field of neurofeedback today.

### Color Figures and Photos

Because color images play an increasingly central role in the fields of neurofeedback and biofeedback, especially in spectral displays and QEEG-based brain maps, selected figures from articles in *Biofeedback* magazine, which require color for clear understanding, will now be posted on the AAPB website, along with the articles, at <http://www.aapb.org/magazine.html>.



Donald Moss

**Proposals and Abstracts**

Authors are invited to submit manuscripts on any topic in applied psychophysiology and biofeedback. Articles are welcome presently for special issues on Advances in the Assessment and Treatment of Traumatic Brain Injury (TBI) for Fall 2009, Biofeedback Applications in Medical Settings for Winter 2009, and Advances in the Use of Surface Electromyography for Spring 2010. Proposals and Abstracts are also invited for additional topics for future special issues of *Biofeedback*.

**NEUROFEEDBACK  
FUNDAMENTALS  
WORKSHOP**

Lynda Thompson Ph.D., Michael Thompson, M.D.  
of the Biofeedback Institute of Toronto, Canada  
Authors of *THE NEUROFEEDBACK BOOK*  
Invited Presenters & Teachers on 5 Continents

**Guest Faculty:**

Professor Vietta Sue Wilson Ph.D.  
Kinesiology & Health Science, York University  
James Thompson, BHK, M.Sc. Ph.D., Applied NeuroSci. Inst., N.Y., USA



**Basic Concepts in  
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Psychophysiology**

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**September 21 - September 25, 2009**

Accredited by the **Biofeedback Certification** Institute of America

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This workshop combines comprehensive instruction in the basics of neurofeedback with an experience of Canadas North. The location is at a small inn on the shores of Stoney Lake in the beautiful Kawartha Lakes District northeast of Toronto. The Workshop will have a strictly limited enrollment due to its unique location and also to ensure the possibility of hands-on experience for all participants. Teaching includes: assessment 1, 2, 19 channel, neuroguide and LORETA analysis, biofeedback combined with NFB for common disorders and for optimizing performance. Mornings run from 8 AM to 1:15 PM followed by some time Monday to Wednesday afternoons for relaxing and for the enjoyment of water sports (boating, canoeing, fishing, swimming and sailing) as well as the possibility of nature walks, excursions to a nearby Indian Art Gallery/Crafts Shop, and a visit to the ancient Peterborough Petroglyphs (rock paintings) at the far end of the lake. These evenings have hands on experience. Thursday and Friday are full day teaching with other activities in the evening. It promises to be a unique learning experience. Accredited by the Biofeedback Institute of America (BCIA).