FROM THE EDITOR

Editor in Chief: Donald Moss, PhD, BCB, BCN

The cover of this issue of Biofeedback shows a photograph of Austin, Texas, the site of the 46th Annual Meeting of the Association for Applied Psychophysiology and Biofeedback (March 11–14, 2015). Mark your calendars now for this exciting scientific meeting, with the conference theme “The Many Faces of Biofeedback.”

Professional Issues
Judy Crawford and Fredric Shaffer provide a report on the Biofeedback Certification International Alliance’s (BCIA’s) Neurofeedback Certification Task Force. Professional certification programs must continuously update their blueprints of knowledge, exams, and reading lists. BCIA once again began a revision process for its neurofeedback certification in 2013, under the guidance of Genie Davis. This report describes the process, which will include a completely revised neurofeedback certification exam before summer 2015.

Feature Articles
Frances Reyes describes the application of heart rate variability (HRV) biofeedback with a population of combat veterans in a Los Angeles transitional housing program. The plight of combat veterans remains serious, and research on mind-body interventions is critical. This author emphasized the role of a weekly group coaching protocol, to reinforce the practice of HRV skills and application of newly learned emotion-regulation techniques during real-life situations. The results included increased HRV and reduced posttraumatic stress disorder symptoms on the PCL-s after HRV training and further improvements on both measures following participation in the coaching group.

J. P. Ginsberg and Wendy Fogo provide an account of a second research study on veterans using HRV biofeedback. The article includes an account by the graduate student/research assistant providing her perspective in participating in the study. This article covers two bases: the critical need for research on mind-body emotional regulation in veterans and some illumination of the integration of graduate students into clinical research. The expansion of graduate study in research, and improving the process of training in research, is critical for the future of biofeedback and neurofeedback as a field.

Mary Donaldson, Stuart Donaldson, and Doneen Moran provide a report on the impact of the low energy neurofeedback system (LENS) on cognitive functioning and brain wave patterns. The LENS system, developed by Len Ochs, is used by a growing number of neurofeedback practitioners, yet research remains limited on its mechanisms and its efficacy. The authors applied LENS to patients with a variety of medical disorders and assessed cognitive functioning pre- and posttraining using the CNS Questionnaire. They also administered quantitative electroencephalograms (QEEGs) both pre- and posttraining. Their study shows improvements in both the cognitive functioning and QEEG in this heterogeneous sample.

Eric Peper and colleagues provide a report on “transforming chained behaviors” in subjects with smoking, eczema, and hair pulling. The concept of chained behaviors derives from the early work of B. F. Skinner and is widely used in behavior modification. Chaining—assembling larger behaviors out of discrete action components—can be used in training complex behaviors, and conversely, understanding negative behaviors as complex chains provides a constructive approach for disrupting the chains and reducing the behaviors. The authors here apply self-monitoring to increase self-awareness of relevant cues and components in behavioral chains, with the substitution of positive self-care practices for the negative behaviors. Three case studies show the success of this approach with college students, addressing their symptoms.

Historical Note
Yiu-Ming Wong provides an interesting note on the use of skin resistance measures in Japanese acupuncture. Galvanic skin response is one of the earliest measures used in Western psychophysiology. Wong points out that it also has a long history in acupuncture since a Japanese physician found in 1950 that skin electrical resistance could be used to differentiate the sites of meridians and acupoints from other skin areas.

Clinical Tips
Vietta Wilson and Erik Peper describe a useful strategy they have used in relaxation training, especially the
relaxation of the musculature. They initially instruct trainees to “relax” and then observe the subjects’ levels of relaxation. Then they add a second instruction to now “relax more” and note a further deepening of the subjects’ objective levels of relaxation, as assessed by surface electromyography measurement. The authors speculate that the level of tension remaining after the first effort to relax is beneath conscious awareness. The second instruction guides the trainee to much lower levels of muscle tension.