Neal Miller: The Legacy

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The cover of this Winter 2010 issue of Biofeedback reminds us to mark our calendars for the March 9–10 AAPB annual meeting in New Orleans, dedicated to, “Mind, Body, and Spiritual Paths to Resilience.”

Both the fall and winter 2010 issues of Biofeedback have included special sections dedicated to Neal Miller (1909–2002), celebrating his pioneering contributions to research in psychophysiology and biofeedback. In the fall 2010 issue, his colleagues and students chronicled the years of Neal Miller’s career and examined the continuing significance of his work. In this winter issue, we include work inspired by Neal Miller but less closely focused on his own research and career. My thanks to Arnon Rolnick, guest editor for the winter issue, for his many efforts in recruiting authors to celebrate the career of Neal Miller and to narrate the continued legacy of Miller’s work.

Professional Issues

This issue opens with a tribute to Randy Neblett on his 2½ years of service as the chair of the Biofeedback Certification International Alliance (BCIA). The article by Fredric Shaffer and Judy Crawford summarizes the many accomplishments and improvements in the BCIA certification program under Randy Neblett’s leadership.

Next, Arnon Rolnick reports on the work of the Neal Miller Centennial Anniversary Committee, which organized an evening of commemorative addresses at the annual meeting of the Association for Applied Psychophysiology and Biofeedback in San Diego, California, in March 2010. This international committee has also created a commemorative Web site, available at http://nealmiller.org/. Readers will find an abundance of material on this Web site, celebrating each aspect of Neal Miller’s life and work.

Bruno Kappes, in a brief article titled “Remembering Neal Miller,” describes two personal encounters with Neal Miller and includes a discussion of the pioneering curare/visceral learning experiments and of Miller’s perspective on the biofeedback training paradigm.

Special Issue: Neal Miller: The Legacy

This section includes an article by Arnon Rolnick and William Rickles, which opens with a discussion of Neal Miller’s original research on psychotherapy. In his collaboration with John Dollard, Miller translated the concepts of psychoanalysis into researchable equivalents in the language of learning theory. Rolnick and Rickles reexamine the spirit of Miller’s original work on psychotherapy, in light of today’s psychotherapeutic focus on the “intersubjective field.” They also label biofeedback as a “bridge to psychotherapy.”

Next, a team including Nava Levit Binnun, Yulia Golland, Michael Davidovitch, and Arnon Rolnick contribute an article titled “The Biofeedback Odyssey.” Their articles begins with Miller’s work on instrumental conditioning of autonomically mediated responses and then reviews current research in biofeedback, especially work on heart rate variability. They propose a model of biofeedback emphasizing the role of interpersonal interactions in regulating physiology.

Feature Articles

Erik Peper and Fredric Shaffer contribute a historical article, “Biofeedback History: An Alternative View,” which narrates the often forgotten contributions of many pioneers to the field of biofeedback research and practice. Their article is worth reading for an appreciation of the interdisciplinary quality of biofeedback from the very beginning and to trace the emergence of many concepts and interventions now taken for granted in everyday biofeedback practice. It is also refreshing to see such names as Thomas Mulholland, Barbara Brown, Gay Luce, and George Whatmore and be reminded what each of these individuals contributed to our current understandings of human self-regulation.

John Corson reports on an innovative psychophysiological approach to working with chronic sex offenders. Corson developed a hyperventilation-based intervention, training sex offenders to hyperventilate in response to thoughts and images of their illegal behavior. The hyperventilation disrupts sexual arousal and interrupts the accompanying train of thoughts. Corson implemented this protocol with a series of 21 offenders in a VA hospital setting, with promising results.
Thomas Caffrey and Robert Clasby provide a report on the use of surface electromyography (SEMG) in a consultation in a newspaper production plant. They used SEMG to show a relationship between muscle dysfunction and specific job tasks and the injury potential of those jobs. Their results showed that SEMG is effective in identifying discordant muscle activity as part of an ergonomic evaluation. The results were used to retrain workers and restructure tasks, with consequent reductions in worksite muscle tension levels in the identified at-risk tasks.

Proposal and Abstracts
Authors are invited to submit manuscripts on any topic in applied psychophysiology and biofeedback. Articles are welcome presently for a special issues on The Use of Biofeedback and Neurofeedback for Optimal Performance for Spring 2011, and The Psychophysiology of Yoga, Mediation, and Spiritual Practices for Summer 2011. Proposals and abstracts are also invited for additional topics for future special issues of Biofeedback.