

Alpha Neurofeedback: Reaching a New Steady State After Trauma

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Abstract

Electroencephalogram (EEG) neurofeedback, aimed at reducing the amplitude of the alpha- rhythms in the brain, has been shown to alter critical brain networks associated with post-traumatic stress disorder (PTSD), resulting in symptom alleviation among individuals with PTSD. A recent RCT has shown that alpha neurofeedback can lead to clinically meaningful reductions in PTSD symptoms. The mechanism underlying these neuroplastic changes of alpha neurofeedback are beginning to be revealed and will be discussed during this keynote. Moreover, the application of this type of neurofeedback in patients with complex trauma and dissociative symptomatology will be illustrated through case examples. Finally, combining alpha neurofeedback with traditional Indigenous practices will be described as a means of addressing the intergenerational transmission of trauma in this population.

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Biography of the Author

Ruth A. Lanius, M.D., Ph.D. is a Psychiatry Professor and Harris-Woodman Chair at Western University of Canada, where she is the director of the Clinical Research Program for PTSD. Ruth has over 25 years of clinical and research experience with trauma-related disorders. She established the Traumatic Stress Service at London Health Sciences Centre, a program that specialises in the treatment of psychological trauma. Ruth has received numerous research and teaching awards, including the Banting Award for Military Health Research. She has published over 150 research articles and book chapters focusing on brain adaptations to psychological trauma and novel adjunct treatments for PTSD. Ruth regularly lectures on the topic of psychological trauma both nationally and internationally. Ruth has co-authored two books: *The Effects of Early Life Trauma on Health and Disease: The Hidden Epidemic* and *Healing the Traumatized Self: Consciousness, Neuroscience, and Treatment*. Ruth is a passionate clinician scientist who endeavours to understand the first-person experience of traumatized individuals throughout treatment and how it relates to brain functioning.