Title: **Amen Clinics NFL Brain Imaging and Brain Rehabilitation Study**

Dr. Kristen Willeumier, Ph.D. and Director of Research at Amen Clinics, presents the findings from the first brain imaging study on active and retired NFL football players that resulted in three published reports in peer-reviewed journals. Working with more than 100 players, representing 27 teams and all positions, the study measured the players’ cognitive capabilities before and after receiving brain-directed treatments. The study, using brain SPECT imaging and other neuropsychological measures, revealed alarming results about damage caused from playing football, as well as the exciting ability to rehabilitate the brain and improve cognitive functions such as memory, mood, and reasoning among others.

This is the first large-scale brain imaging study to demonstrate significant differences consistent with a chronic brain trauma pattern in professional football players. Furthermore, we went on to evaluate potential treatments to rehabilitate brain function in 30 players within this cohort and we demonstrate cognitive and cerebral blood flow improvements are possible with multiple interventions.

**About the Speaker**

Kristen Willeumier, Ph.D., currently serves as the Director of Research for the Amen Clinics, based in Newport Beach. The Amen Clinics has pioneered the use of brain SPECT imaging in psychiatric practice and for the past 20 years has amassed a database of over 75,000 brain scans from patients visiting from 90 different countries.

Dr. Willeumier joined the Amen Clinics in 2009, bringing over 10 years of neuroscience experience. Together, Drs. Amen and Willeumier have published nine articles in peer reviewed journals, with three focused on brain related issues critical to NFL players. She has been an invited speaker to NFL Players Association meetings and to the 2012 Independent Football Veterans Conference with the goal of educating players on the implications of subconcussive impacts on brain function along with rehabilitation strategies that can help restore brain function.

Dr. Willeumier earned a B.A. from Boston College, an M.S. in Physiological Science and an M.S. and Ph.D. in Neurobiology from UCLA. She completed post doctoral training in Neurology from Cedars Sinai Medical Center in Los Angeles, CA. Her areas of expertise include neurophysiology and neurogenetics and her doctoral training focused elucidating mechanisms underlying Parkinson’s disease. She is the recipient of NIH funding, is a member of Society for Neuroscience and has presented her work at both national and international scientific conferences.