



## Theodore A Henderson

*Neuro-Laser Foundation, USA*

**Functional Neuroimaging in the early diagnosis of Dementia and Mild Cognitive Impairment**

As the world population ages, the incidence of dementing illnesses will dramatically increase. The number of people afflicted with dementia is expected to quadruple in the next 50 years. Repeated attempts at pharmacological interventions have failed largely because treatment is reserved for those already diagnosed with dementia. It is now clear that methods to diagnose early are critical to the success of treating dementia. Early detection and intervention also are key to mitigating the progression from Mild Cognitive Impairment to full-blown dementia. Anatomical imaging, cerebrospinal fluid markers, functional neuroimaging, such as positron emission tomography and single photon emission computed tomography, and molecular imaging, such as amyloid marker imaging, will be assessed in terms of sensitivity and specificity. Particular emphasis will be placed on the diagnosis of Mild Cognitive Impairment – the precursor to dementia. Cost will also be considered as the growing population afflicted with dementia represents an increasingly large financial encumbrance to the health

care systems of every nation. Recent meta-analysis data of single photon emission computed tomography will be reviewed relative to sensitivity and specificity data of fluorodeoxyglucose and amyloid marker positron emission tomography.

### Speaker Biography

Theodore A Henderson is founder of Neuro-Luminance Brain Health Centers, Inc. and director of the Synaptic Space. He has extensive training and experience to the practice of Psychiatry and brain sciences. He trained in Psychiatry at the prestigious Barnes/Jewish Hospitals at Washington University/St. Louis and Child & Adolescent Psychiatry at the University of Colorado. He also has training in Radiology, Nuclear Medicine, and the Genetics of Psychiatry. He established his private practice in Centennial Colorado in July of 2000. He has achieved an advanced level of understanding of Psychopharmacology, referred to as Master Psychopharmacologist. He lectures regularly and has written or published on unique treatment approaches to depression, chronic fatigue, ADHD, and anxiety. He also has taught courses on neuroimaging. He is a guest editor for a number of journals, including JAMA, Journal of Neuropsychiatry, and the Journal of Nuclear Medicine.

e: [thesynapticspace7@gmail.com](mailto:thesynapticspace7@gmail.com)

 Notes: