

**GUEST LECTURE, Thursday October 8, 3.30 – 5.00 pm**

**Conference Room, 3<sup>rd</sup> floor – Dept. of Oncology. Aarhus University Hospital, NBG.**

## **CANCER AND COGNITION – the neuropsychology of CNS – and non-CNS cancer and cancer treatments – current state of the science**

**Jeffrey S. Wefel, PhD, Associate Professor, Dept. of Neuro-Oncology, The University of Texas M.D. Anderson Cancer Center**

Advances in diagnosis and treatment of cancer have greatly improved survival. However, this success comes at a cost since survivors are living with the long-term side effects of cancer treatment. It is increasingly appreciated that cognitive dysfunction is a frequent neurotoxicity of cancer therapies in many different cancer populations. Cognitive dysfunction is ubiquitous in patients with brain tumors such as glioblastoma. The most profound neurotoxicities are generally seen with treatments directed at the brain (i.e., brain irradiation), but neurotoxicity has also been observed following systemically administered therapies (e.g., chemotherapy for non-CNS cancer), which can have “off target” effects that impact brain and cognition directly and/or indirectly. Impairments in cognitive function adversely impact quality of life and can result in diminished functional independence. The increased incidence of cancer, coupled with longer survival times, has resulted in larger numbers of cancer survivors who are struggling with this neurotoxicity.

Dr. Wefel's presentation will focus on the cognitive sequelae of cancer and cancer therapy. Emphasis will be placed on reviewing the literature in women with breast cancer as a model that demonstrates the potential adverse cognitive effects of systemically administered chemotherapy regimens in patients with non-CNS cancer. Additionally, the role and relevance of neuropsychology in brain tumor research and patient care will be reviewed.



Dr. Wefel is a board certified neuropsychologist, Associate Professor, and Neuropsychology Section Chief in the Department of Neuro-Oncology. He is a Founding and Steering Committee member of the International Cognition and Cancer Task Force, and maintains an active consultation-liaison service where he conducts comprehensive neuropsychological assessments, presurgical fMRI of higher order cognitive function for neurosurgical planning, and offers interventions to adult cancer patients suffering from the central nervous system effects of cancer, cancer treatment, or other illnesses. Dr. Wefel's research activities seek to characterize the prevalence, pattern, course, risks, and biologic and neural substrates for the development of neurocognitive dysfunction associated with cancer and cancer therapies.



**UNIT for PSYCHO-ONCOLOGY and HEALTH PSYCHOLOGY**

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