academic performance ($r = 0.50$). Both the CTB and the WAIS-R Verbal section were also moderately correlated with all SFAB sections (residential, daily living, academic and vocational). The CTB showed a significantly higher correlation to residential living ($r = 0.31$) and vocational skills ($r = 0.38$) than did the WAIS-R Verbal section ($r = 0.15$; $r = 0.21$), while the WAIS-R VIQ showed a higher correlation with academic skills ($r = 0.73$). Results of this study provide further support for the CTB as a measure of intelligence for the VI/B population. The CTB has the distinct advantages of norms for this population for both verbal and performance measures. Nevertheless, the WAIS-R VIQ provides unique information which can supplement the CTB data in interpreting specific functional outcomes.

**Intermanual visuoconstructional differences in rehabilitation patients**

*Bush S, Leonard C.*

Successful performance on visuoconstructional measures requires adequate integration of perceptual skills, spatial orientation, motor skills, and executive functions; thus, contributions are received from diverse cerebral regions. Clock drawings are frequently used in the assessment of visuoconstructual skills with patients who have sustained brain injuries. Although clock drawings are typically performed with the dominant hand, many individuals who have sustained brain injuries have impaired function of the dominant upper extremity. While examiners may choose to have their patients complete visuoconstruction tasks with their nondominant hand, normative data are not available for patients undergoing rehabilitation. A recent study with healthy community dwelling adults revealed nonsignificant differences between hands on the clock drawing test (Bush, 2000). However, normative data based on a rehabilitation population have not been available. The purpose of this study was to examine intermanual visuoconstructional differences in medical rehabilitation patients in order to provide baseline data more reflective of the patients that undergo neuropsychological evaluations during neurorehabilitation. The subjects were 15 subacute medical rehabilitation patients without history of neurologic, visual, or upper extremity motor impairment. Twelve were female, and 3 were male. All 15 subjects were right-handed. The mean age was 81.07 years (SD = 9.67), and the mean education level was 11.67 (SD = 1.76). Subjects completed free-drawn clocks with each hand, setting the clock hands to the 11:10 position. Clock drawings were scored according to a 15-point system (Freedman et al., 1994) that assesses four general categories: contour, numbers, hands, and center. The mean dominant hand score was 11.60 (SD = 4.08). The mean nondominant hand score was 8.07 (SD = 7.02). The intermanual difference was determined with a paired t-test. The difference was significant [t(14) = 4.30, p = 0.0007]. Thus, the results of this preliminary study suggest that, with subacute medical rehabilitation patients, the nondominant hand may not be comparable to the dominant hand in the performance of visuoconstructional tasks. Therefore, examiners should exercise caution when interpreting the results of visuoconstructional measures obtained via the nondominant hand in patients demographically similar to the current subjects. Potential neuropsychological implications of these findings are presented, and limitations of this study are discussed. Further research involving nondominant hand performance on neuropsychological measures appears warranted.

**Neuropsychological correlates of adjunct therapy with a nutritional/vitamin supplement in a medical patient sample**

*Kushch A, Keller RH.*

A novel dietary supplement containing Gingko biloba, Ginseng, Gotu kola, Vitamin B complex, and other compounds thought to have cognitive effects in the literature was administered as adjunct
therapy to a sample of medical patients in an immunology clinic for an average of 80 days. A short neuropsychological battery including subjective and objective measures of cognitive functioning as well as emotional well-being was given to 4 female and 5 male patients taking the supplement as well as 10 female and 2 male controls not taking the supplement using a Pre/Post study design. Two forms of verbal short story memory from P. Green and E. Kramer (1983) and visual memory using the Rey Complex Figure and Taylor Alternate Form were counterbalanced. Preliminary results show that patients taking the supplement report significant cognitive improvement (t (8)= 3.15, p<0.2) on the Cognitive Difficulties Scale. This finding was substantiated with a significant improvement in visual attention and concentration (t (8)= 3.18, p<0.2) as measured by the Wechsler Memory Scale-Revised Visual Span scores. No statistically significant findings were found in the areas of verbal and visual memory, information processing speed, verbal fluency, and executive functions. Further studies using a double-blind design with improved controls will be needed to verify the efficacy of this adjunct dietary therapy.

Can frontal lobe functioning be modified by cognitive rehabilitation after stable malignant neoplasm?
Portman SM, Russo AA, Prados MD.

Traditional cognitive rehabilitation has focused on retraining of attention and memory in patients with CHI or stroke. Few treatment programs include retraining of frontal lobe functions, and those which do focus on a narrow segment of executive functioning. Very few brain tumor patients receive cognitive intervention although most experience some deficits, if not a progressive decline, in neurocognitive abilities following surgery and post-operative interventions. For frontal lobe tumor patients, changes in frontal lobe functioning have profound effects on interpersonal relationships and higher cognitive tasks. This study examines the efficacy of cognitive retraining of frontal lobe functioning in primary frontal lobe tumor patients. Seven patients with stable disease were studied following tumor resection, chemotherapy, and radiation, both before and after brief cognitive rehabilitation. Treatment sessions focused on executive functioning, disinhibition, affective disorders, memory, and word fluency. Patients were compared with seven frontal lobe tumor patients who did not undergo treatment. The results of this study showed overall improvement from baseline in executive functioning (0.05), with a trend in affective functioning and verbal memory following cognitive retraining. However, when compared to the non-treatment group, which decreased in level of functioning, results were significant (0.05) for all 3 areas. No significant changes were seen in level of disinhibition.

Neuropsychological assessment in patients evaluated for hyperthermia for metastatic nonsmall lung carcinoma (FDA phase 1 and phase 2)
Baker J, Zwischenberger J, Baumgartel A.

This poster will identify the use of neuropsychological assessment for cognitive functioning in a procedure approved and completed for Phase I study and recently approved for Phase II study by the FDA. Neuropsychological sequelae were examined to identify differences in pre- and post-surgical procedures. The procedure involves whole body hyperthermia (WBHT) which has been tested repeatedly in the U.S. and Europe for many years in the treatment of patients with advanced and metastatic cancers.