Fatigue is the most frequently reported side effect of cancer treatment, and some estimates report its occurrence in up to 100% of patients (Broeckel, Jacobsen, Horton, Balducci, & Lyman, 1998; Jacobsen et al., 1999). Interest in fatigue experienced by patients receiving cancer treatment has increased substantially in recent years. This heightened interest is consistent with literature reporting that fatigue remains the most common and distressing symptom experienced by patients with cancer receiving chemotherapy (Atkinson et al., 2000; Jacobsen et al.). Cancer treatment-related fatigue (CRF) is disruptive and can adversely affect quality of life and the optimal recovery course of patients receiving treatment (Broeckel et al.; Richardson, Ream, & Wilson-Barnett, 1998).

Although CRF occurs frequently, minimal research has been conducted to understand its mechanisms. Most studies of fatigue related to cancer treatment have focused on patients’ subjective self-reported experiences, with a few studies measuring changes in fatigue over a course of repeated treatments (Jacobsen et al., 1999). The current study was designed to determine whether fatigue levels and select physiologic measures would change over time while subjects were receiving chemotherapy treatment and to examine fatigue mechanisms on a yet undetermined physiologic basis. Specifically, the purposes of this pilot study were to evaluate changes in levels of subjective fatigue in patients with early-stage breast and ovarian cancer undergoing chemotherapy treatment and to examine fatigue mechanisms on a yet undetermined physiologic basis.