Just over 50 years ago, childhood acute lymphoblastic leukemia (ALL) was a universally fatal disease, with half of affected children succumbing within four months of diagnosis. The first treatment for childhood ALL was introduced in the late 1940s, but the disease was still considered incurable until the 1960s when combination chemotherapy and prophylactic central nervous system (CNS) therapy were introduced, resulting in survival of five years or more in some children. In the 1970s, intensified therapy further improved survival rates. In the 1980s, therapy was refined to provide more intense therapy for those at higher risk of relapse and less toxic therapy for those at lower risk. In the 1990s, the focus shifted to the study of molecular characteristics of the disease and refinement of treatment regimens based on genetic abnormalities of leukemic clones. Today, children diagnosed with ALL have an overall cure rate of at least 80%, with some low-risk subgroups approaching a 90% chance of cure (Pui & Evans, 1998; Rubnitz & Crist, 1997). The advances made in the treatment of ALL over the past 50 years, achieved both through collaboration of multidisciplinary teams of specialists in cooperative groups.