

**Public Lecture by Dr. Barbara Parker**  
**“Progress in Prevention and Treatment of Colon Cancer”**  
**March 21, 2001 at 6:00 p.m. in the Garren Auditorium, Basic Science Building**  
**Sponsored by the Sam & Rose Stein Institute for Research on Aging, UCSD**

This lecture will review the risk factors, presentation, natural history and advances in the treatment of colorectal cancer.

Colorectal cancer is the second most common cause of cancer death among American men and women. Signs and symptoms of underlying colorectal cancer may include unexplained abdominal pain, recent change in bowel habits, constipation, rectal bleeding, poor appetite, weight loss, or anemia. Studies have shown that screening programs can detect early-stage colorectal carcinomas when they are most curable. Colon polyps are the likely precursor to the development of cancer in most patients. Advances in the understanding of the molecular events involved in the development of colon carcinoma have led to the development of agents that may prevent the development of colorectal cancer. Celecoxib (Celebrex) is a Cox-II inhibitor that has activity in decreasing the development of premalignant polyps in patients with an inherited form of colon polyps associated with an elevated risk of colon cancer. Colorectal cancer is a multidisciplinary disease that requires careful treatment planning and coordination by the primary care physician, gastroenterologist, surgeon, medical oncologist, and radiation oncologist to optimize treatment outcome.

Advances in the use of chemotherapy and biologic therapy in the treatment of colorectal cancer will be discussed. The chemotherapy agent, fluorouracil, has been the mainstay of colorectal cancer chemotherapy treatment for decades. Based on advances in the understanding of the mechanism of action of fluorouracil, several new oral and intravenous agents with activity in colorectal cancer are now available. A new drug, irinotecan, can now be used in combination with fluorouracil to improve the survival of patients with advanced metastatic disease. Additional new drugs with activity in this disease include oxaliplatin and capecitabine. Biologic agents and anti-angiogenesis drugs that are promising in preliminary trials include anti-VEGF monoclonal antibody, C225 and SU5416. These agents offer the possibility of improved outcomes when combined with standard treatments and/or diminished side effects over standard approaches. Additionally, based on the understanding of the molecular events involved in colon cancer development, new factors are being evaluated for prediction of patients who may best benefit from chemotherapy or biologic therapy beyond surgical treatment.