Wilhelmina E. Bell-Taylor
RaceforLungLife
5K RUN WALK
it's not just about smoking

c/o Community Education Network, Inc.
P.O. Box 6834, Silver Spring, MD 20906
Telephone Number - (240) 330-5151
www.raceforlunglife.com

Press Release

April 2010

Exciting Advances in Lung Cancer Research for Never Smokers

The Race for Lung Life is pleased to support research efforts at the Johns Hopkins Kimmel Cancer Center for prevention, early detection, and promising clinical trials. This year's donations will support the following research studies underway:

Lung Cancer Prevention

Saliva Test
Researchers at the Johns Hopkins Kimmel Cancer Center are developing a saliva test for lung cancer. This test detects gene alterations in the saliva and is able to catch the cancer before it progresses. Compared with current detection methods the test is proving to be more sensitive and deliver rapid results. This test is also being used for oral and head and neck cancers.

Promising Clinical Trials

Immunotherapy
Dr. Julie Brahmer and her team are utilizing the patient's own immune system to combat their lung cancer. Immune cells are able to specifically target and eradicate altered cells that pose a danger to a person. For example, normal cells infected by viruses can be destroyed to stop the infection, but leave uninfected cells and healthy tissue intact. In this same way, immune cells can be trained to recognize cancer cells and destroy them while leaving the surrounding healthy tissue intact. In addition, immune cells trained in this manner develop a memory allowing them to maintain surveillance of a person's body for recurrence of cancer. These two characteristics, if developed appropriately, could provide specific and long term protection with reduced side-effects in lung cancer treatment. This is being done through cancer vaccines. Ongoing work in the tumor immunology division has identified novel potential drugs and targets in the immune system to increase its activity. By using mouse models of lung cancer currently available at Johns Hopkins, researchers will be able to screen these compounds quickly to determine their effectiveness in lung cancer.

Gene Therapy
Dr. Brahmer and her team are actively researching drug therapies to attack the EGFR gene. This gene mutation is often found in patients who have never smoked. EGFR normally promotes cell growth and development, and when mutated, allows the uncontrolled growth of cells. Researchers are testing various EGFR inhibitor drugs and studying the "never smoker" population to develop more effective therapies that directly target this gene alteration.