NATIONAL CANCER INSTITUTE

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Eliminating the Suffering and Death Due to Cancer

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Potential Familial Lung Cancer Gene Location Discovered

Researchers have found a possible inherited component for lung cancer, a disease normally associated with external causes, such as cigarette smoking. An interdisciplinary consortium consisting of 12 research institutions and universities, including the National Cancer Institute (NCI) and the National Human Genome Research Institute (NHGRI), identified a major lung cancer susceptibility region on a segment of chromosome 6. The findings appear in the online edition of *American Journal of Human Genetics* and will appear in print in the September 2004 issue.

…smoking even a small amount can lead to cancer for individuals with inherited susceptibility.

The Genetic Epidemiology of Lung Cancer Consortium examined 52 families who had at least 3 first-degree family members affected by lung, throat, or laryngeal cancer. Of these 52 families,

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Director's Update

In Cancer Research Today, Success Breeds Success

Advances in cancer research and treatment are truly gratifying things to witness, which is why I'm extremely excited about the prospects for important new advances heralded by a study published recently in *Science*. The study gets to the heart of a problem that has vexed many cancer researchers: drug resistance. In the past, when drugs, especially chemotherapy drugs, did not work in some patients, we had limited success in quickly determining why. But today, we have the tools and knowledge at our disposal to "reverse engineer" developmental therapeutics and determine the genetic or molecular basis for success or failure of a targeted therapy. And that is exactly what has now been done for the targeted therapy imatinib (Gleevec), and in a staggeringly short amount of time.

Imatinib has been one of the most dramatic success stories in cancer therapy over the past few years. This targeted agent has produced impressive results in patients with chronic myeloid leukemia (CML), achieving remission in many patients. Unfortunately, imatinib has its shortcomings: 15-20 percent of CML patients are either resistant to it or develop resistance to it. But insights from research conducted over just the past few years have laid the groundwork for efforts to test agents that could overcome imatinib resistance.

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(Lung Cancer Gene continued from page 1)
23 had 5 or more affected members in at least 2 generations. Using 392 known genetic markers, which are DNA sequences that are known to be common sites of genetic variation, the researchers generated and then compared the alleles of all affected and nonaffected family members who were willing to participate in the study.

The research consortium is led by Dr. Marshall Anderson of the University of Cincinnati and includes Dr. Jonathan Wiest of NCI and Dr. Joan Bailey-Wilson of NHGRI, as well as many other researchers from eight other institutions around the country. They found strong evidence that a lung cancer susceptibility gene or genes are co-inherited with a genetic marker on chromosome 6. Markers on chromosomes 12, 14, and 20 also indicated possible linkage to lung cancer susceptibility, although the results were not as strong. Identifying the location was a critical first step, but more work needs to be done.

"The genetic markers are like the mileage markers you see on the side of the highway," explained Dr. Wiest. "They can be very useful for broad navigational purposes, but they don't give you precise information about all the interesting things that may lie along the highway."

Another discovery the team made involved the effects of smoking on cancer risk for carriers and noncarriers of the gene. They found that in noncarriers, the more they smoked, the greater their risk of cancer. In carriers, however, any amount of smoking increased lung cancer risk. These findings suggest that smoking even a small amount can lead to cancer for individuals with inherited susceptibility.

"Smoking remains the most critical risk factor for lung cancer," said Dr. Wiest. "Identification of the gene may one day enable us to screen for individuals at high risk for lung cancer, but this does not mean that smoking is safe or that individuals without this gene are protected in any way, particularly if they smoke."

"The discovery of genes for other types of cancer has led to better understanding of those diseases, which in turn can lead to better treatment and prevention. We hope that uncovering a gene or genes responsible for lung cancer will do the same for this devastating disease," said Dr. Bailey-Wilson.

The next goal for these researchers is to pinpoint the exact gene or genes within the region responsible for the susceptibility. They also plan to continue screening additional families that could have familial lung cancer, both to confirm their findings and find additional susceptibility regions. ◆

(Director's Update continued from page 1)
The results of the first such studies were published in the July 16 issue of *Science*, by researchers from the UCLA School of Medicine and the Howard Hughes Medical Institute. The research team, led by Dr. Charles Sawyer, showed that an "off-the-shelf" oral agent initially developed for use against solid tumors could significantly prolong survival in a CML mouse model and demonstrated promising activity in laboratory tests on bone marrow cells from CML patients. Based on these results, the drug, BMS-354825, is now being tested in phase I human trials.

This seminal study followed from earlier structural biology research that made several important findings about how imatinib binds to its target enzyme and the mutations that lead to imatinib resistance. Those findings led the researchers to investigate an agent that was less selective and could bind to these mutated targets. Relying on technologies such as small molecule screens, crystallography, and bioluminescence imaging, the team was able to show that BMS-354825 was effective against 14 of the 15 imatinib-resistant CML mutations they tested. They suggest in their paper that other such kinase inhibitors might also be effective at combating imatinib resistance.

The excellent work of these investigators provides tremendous promise. Based on these results, similar agents are now being further investigated and there is great potential to use them alone or as part of a treatment cocktail, as is typically done with HIV.

It's often said that it takes 10-15 years to bring a new drug to market, but we have entered a remarkable era where this is no longer the case. We are reaping the fruits of the knowledge that we have amassed about the genetic, biochemical, and structural underpinnings of cancer and are refining our ability to apply that knowledge with the use of advanced technologies. And, most importantly, we can do this *quickly and more accurately*. In a short time, researchers were able to identify the cause of clinical resistance to imatinib and identify drugs that can overcome that resistance. This is just another example of the exponential progress that we will see over the next few years, with rapid development of first- and second-generation therapies that are swiftly moved through the appropriate clinical trials and into clinicians' treatment arsenals.

Today, the process of cancer discovery, development, and delivery is drastically different than it was yesterday. We are witnessing success that was unimaginable 5 to 10 years ago and, as a result, we are a step closer to our goal of ending suffering and death from cancer. ◆

Dr. Andrew C. von Eschenbach
Director, National Cancer Institute

Special Report

SPNs Conference Outlines Program's Successes

Nearly 5 years ago, NCI developed an innovative approach to addressing cancer health disparities when it initiated the Special Populations Networks (SPNs). The purpose of SPNs was to build an infrastructure for promoting cancer awareness within minority and medically underserved communities. If the concept worked well, it would lead to more research and cancer control activities targeting special populations.

Today, 18 SPNs focus on cancer in Asian American, Hispanic, African American, American Samoan, Native Hawaiian, Appalachian, American Indian, and Alaska Native communities. Seventeen of the 18 networks are affiliated with a university, hospital, or NCI-sponsored cancer center. The exception, Papa Ola Lokahi, is owned and operated by the Hawaiian community. They have helped bring a fresh approach to disparities research by recommending research directions and posing research questions. Through population studies, SPNs have helped confirm the extent of disparities in minority and underserved populations.

SPNs have developed and enhanced many community-based partnerships by opening lines of communications and bringing together universities, cancer centers, health professionals' organizations, and communities on cancer disparities. Most importantly, SPNs have led to an increase in cancer screening and access to and participation in clinical trials.

More than 300 investigators and community-based clinicians from around the United States and 6 jurisdictions that make up the U.S.-associated Pacific attended the Cancer Health Disparities Summit 2004 from July 18-20 in Washington, D.C. They exchanged data, shared ideas, and reported on their progress. The Cancer Information Service, a partner in the SPNs project, also participated in the conference and provided an overview of its outreach and education work in support of SPNs, which included public education campaigns tailored to specific communities.

This meeting comes at a critical time in NCI's ongoing efforts to address cancer health disparities. The SPNs program will end in early 2005 and be replaced by the Community Networks Program to Reduce Cancer Health Disparities. This new 5-year program will build on the work of SPNs by providing $24 million per year, starting in fiscal year 2005 to fund 18 to 22 grants per year. The program will focus on improving cancer interventions in underserved communities, redirecting attention from awareness of disparities to actually eliminating disparities. The new program will expand capacity to support community-based education, research, and training programs by developing community-based participatory and training programs and promoting longevity for programs that reduce cancer disparities.

A Town Hall session on the first day of the meeting featured Dr. Harold Freeman, director of NCI's Center to Reduce Cancer Health Disparities and Dr. Mark Clanton, NCI deputy director for Cancer Care Delivery Systems.

"It's wonderful now that we have researchers from these communities," Dr. Freeman told conference participants as he traced the history of NCI's interest in cancer health disparities to a 1973 paper by Dr. LaSalle Leffall, Jr. and Dr. U.K. Henschke that "put this issue on the map" by calling attention to the striking difference in cancer mortality in African Americans. Dr. Leffall currently serves on the President's Cancer Panel.

Dr. Clanton told summit participants that addressing cancer disparities is an integral part of NCI's strategic priorities. "The strategic emphasis that we have in this area makes your work vitally important," said Dr. Clanton. He also pointed out that the need to address disparities remains a high priority on NCI's agenda.

SPN investigators have published more than 130 journal articles based on research from the SPNs. It is notable that the SPNs have acquired an additional $20 million beyond NCI grants for the purpose of funding cancer awareness, research, and training programs. The SPNs also have identified and trained a number of minority researchers who are now working on SPN projects. ◆

Tobacco Products Excise Taxes

Cigarettes

All 50 states and the District of Columbia impose excise taxes on cigarettes. As of December 31, 2003, these taxes ranged from 2.5 cents per pack in Virginia to $2.05 per pack in New Jersey. The nationwide average is 72.8 cents per pack—an increase of 12.7 cents from 2002.

New Jersey's and Rhode Island's ($1.71) taxes are the highest in the nation. Connecticut, Massachusetts, and New York also have cigarette excise tax rates at $1.50 or more. Kentucky, North Carolina, South Carolina, and Virginia have the lowest rates: all below 10 cents. Eleven states have cigarette tax rates of $1.00 to $1.49.

During 2003, 14 states enacted laws to increase their cigarette excise taxes. Lawmakers in Montana, New Jersey, and New Mexico mandated the largest increases by raising their cigarette taxes 52 cents or more. The average tax increase during 2003 was 36.9 cents, down 6.6 cents from an average increase of 43.5 cents in 2002.

Chewing Tobacco and Snuff

Forty-seven states impose excise taxes on chewing tobacco and snuff. Forty-four states tax a percentage of the wholesale price, the manufacturer's selling price, the invoice price, or the list price. Only Alabama, Arizona, and North Dakota tax both chewing tobacco and snuff according to weight. While Connecticut and Montana impose taxes on chewing tobacco at a percentage of the wholesale sales price, snuff is taxed by weight.

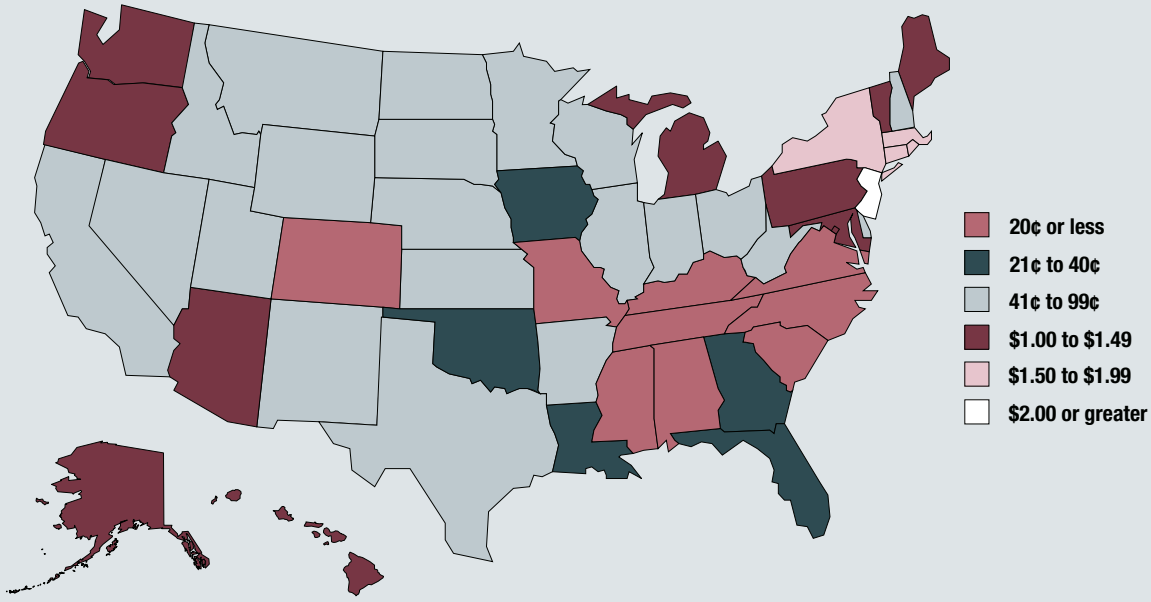
In 2003, Arkansas and Montana increased existing excise taxes on chewing tobacco and California and New Hampshire decreased taxes on these products. During that year, Georgia added a new tax of 10 percent of the wholesale cost price on chewing tobacco and snuff, and Montana added a 35 cents per ounce tax on snuff.

Dedicated Excise Tax Facts

Sixteen states have laws requiring a portion of their cigarette excise taxes to be dedicated to cancer or tobacco control programs. Since 1998, few states have enacted legislation dedicating tobacco excise taxes to health or tobacco control purposes. However, during this same time, the states began receiving payments from the tobacco industry through the Master Settlement Agreement and through other state settlements and many have dedicated a portion of these funds to cancer and tobacco control. ◆

Source: National Cancer Institute: State Cancer Legislative Database Program, April, 2004, http://www.scld-nci.net

Excise Tax Rate Per Pack of Cigarettes
(as of December 31, 2003)



Cancer Research Highlights

Adherence in Cancer Screening Trial

False-positive results in a cancer screening trial can significantly affect health-related quality of life (HRQL) and adherence to the trial. A study in the July 21 *Journal of the National Cancer Institute* examines these two issues in the context of a cancer screening trial, compared with the more frequently studied trials for cancer treatment, prevention, or symptom management. Dr. Kathryn Taylor and colleagues at Georgetown University School of Medicine assessed HRQL and trial adherence of 432 participants of NCI's Prostate, Lung, Colorectal, and Ovarian Cancer Screening Trial, designed to assess whether annual screenings will reduce mortality rates. Individuals in both the control and screening groups were interviewed before the initial screening and requested to complete questionnaires 1 year later. Individuals in the screening group were also interviewed shortly after receiving test results, about 3 months after the baseline assessment.

Researchers found that individuals who received an abnormal, potentially cancerous result experienced a short-term decrease in HRQL. At the 1-year interval, when the abnormal result had been shown to be a false-positive, these individuals had returned to baseline HRQL levels, indicating that false-positive results did not have lasting effects on HRQL. False-positive results did have long-term implications in terms of adherence, however. Of the participants who responded, only 78.7 percent of those who had received abnormal results completed all the required follow-up screenings at the 1-year interval, compared with a 93.7 percent completion rate among individuals receiving normal results. "Focusing additional attention and trial resources on nonadherent subgroups, including those who received false-positive results, may improve overall adherence rates in a cost-efficient manner," Dr. Taylor said.

Clinical Trials and Mandated Reimbursement

Cancer patients living in states where legislation mandated third-party reimbursement for medical costs for clinical trial participants were more likely to enroll in phase II clinical trials than patients in states where reimbursement was not mandated, according to a study in the July 21 *Journal of the National Cancer Institute*, funded in part by NCI. Dr. Cary P. Gross and colleagues at Yale University studied whether effects of state-issued reimbursement plans were associated with an increase in NCI Clinical Trials Cooperative Group enrollment from 1996-2001.

Researchers analyzed 72,709 patient records in phase II and III clinical trials to assess trends associated with reimbursement legislation and trial enrollment. States with mandated repayment policies showed a statistically significant increase in trial enrollment during the study period over those states without such legislation. Investigators also analyzed a study sample of privately insured patients and found a statistically significant increase in both phase II and III trial enrollment in states with and without mandatory reimbursement policies; the rate of increase in states with mandated reimbursement was found to be significantly higher compared with states without mandated reimbursement.

Though enrollment in phase II trials was increased in states with mandatory reimbursement policies, overall trial enrollment and enrollment in phase III studies did not increase substantially. Researchers suggest that "…physician and patient knowledge, beliefs, and attitudes concerning trials, as well as logistical barriers, have a greater influence on patient participation than legislative mandates."

High-Dose Chemo for Advanced Breast Cancer

High-dose chemotherapy does not improve survival rates for women with metastatic breast cancer and multiple positive lymph nodes, compared with conventional adjuvant chemotherapy. A randomized trial of 605 patients with high-risk breast cancer compared treatment with high-dose chemotherapy using stem cell transplant versus conventional chemotherapy, and showed that there were no significant differences in survival rates at the 6-year follow-up.

Dr. Robert Leonard and colleagues from the Anglo-Celtic Cooperative Oncology Group noted in the July 21 *Journal of the National Cancer Institute* that previous uncontrolled studies suggested better results with high-dose chemotherapy. The two groups of women—all with four or more positive lymph nodes—were randomly assigned to receive either conventional therapy or high-dose therapy with stem cell transplant. Most women in both groups were prescribed 5 years of tamoxifen treatment.

Breast cancer patients with four or more positive lymph nodes have a poor prognosis—approximately two-thirds will develop fatal metastases. Adjuvant therapy using the anthracycline-containing combination chemotherapies is the currently accepted standard.
(continued on page 6)

(Research Highlights continued from page 5)
"There was no statistically significant difference in relapse-free survival between the arms of the trial," the authors noted. "These results indicate that the single, high-dose…chemotherapy strategy confers extra cost and toxicity without added anticancer benefit." The study was conducted with support from Amgen Limited (UK).

Screening Saved 5,500 Lives, Study Says

A national cervical cancer screening program in the United Kingdom (UK) has prevented an estimated 5,500 deaths annually among women born after 1950, according to a study in the July 17 *Lancet*. The study, funded by Cancer Research UK, was conducted to determine whether the screening program, launched in 1988, was an economically and socially sound investment of resources.

Using age-cohort modeling, the researchers, led by Dr. Julian Peto of the London School of Hygiene and Tropical Medicine, looked at all uterine cancer mortality rates obtained from the World Health Organization database from 1985-1999 for 38 countries in Europe, North America, and Australia, and cervical cancer death rates among women in the UK. Overall, the UK had the highest mortality rate for women aged 30-34, compared with Western Europe, North America, and Australia. However, 10 years after the UK national screening program was initiated, the mortality rate in this birth cohort had the smallest increase of any developed country. Without any screening, the researchers concluded, an estimated 11,000 women in the UK would have had invasive cancers, resulting in 5,500 deaths per year by 2030. The screening program has saved 1 in 65 women from dying of cervical cancer in the UK, they wrote, at a cost per life saved of $67,000 (US). ◆

Featured Clinical Trial

Study of Individuals and Families at High Risk for Blood Cancers

Name of the Study
Prospective Study of Clinical, Laboratory, Genetic, and Epidemiologic Characterization of Individuals and Families at High Risk for Hematologic Cancers (NCI-02-C-0210). See the protocol summary at http://cancer.gov/clinicaltrials/NCI-02-C-0210.

Principal Investigators
Dr. Neil Caporaso and Dr. Mary McMaster, NCI's Division of Cancer Epidemiology and Genetics

Dr. Neil Caporaso

Dr. Mary McMaster
Principal Investigators

Why Is This Study Important?
Hematologic cancers are cancers of the blood, lymphatic system, or bone marrow, such as leukemia, lymphoma, and myeloma. Together, these diseases constitute the fourth most common form of cancer, with more than 100,000 new cases a year in the United States.

Researchers want to study individuals and families who may have a genetic predisposition to developing hematologic cancers. Studying this population may help identify other persons at risk, precursor conditions, clues to etiology, and the genes involved in these malignancies.

"We have compared DNA from family members affected by chronic lymphocytic leukemia (CLL) with those family members not affected by CLL through linkage analysis," said Dr. Caporaso. "This allows us to identify areas of the DNA that may harbor a gene or genes responsible for causing the disease."

"We are also recruiting families having more than one member diagnosed with Waldenstrom's macroglobulinemia, Hodgkin's lymphoma, and non-Hodgkin's lymphoma so that we can conduct analyses to identify genes that may predispose people to these cancers," said Dr. McMaster.

Who Can Join This Study?
Researchers seek to enroll participants who may be at high risk for developing hematologic cancers. See the full list of eligibility criteria for this study at http://cancer.gov/clinicaltrials/NCI-02-C-0210.

Where Is This Study Taking Place?
The study will be conducted at the NIH Clinical Center in Bethesda, Md.

Who to Contact
Contact the NCI Division of Cancer Epidemiology and Genetics, Genetic Epidemiology Branch referral nurse at 1-800-518-8474, or call the NCI Clinical Studies Support Center (CSSC) at 1-888-NCI-1937. The call is toll free and confidential. ◆

An archive of "Featured Clinical Trial" columns is available at http://cancer.gov/clinicaltrials/ft-all-featured-trials.

Notes

Symptom Management in Cancer

A new *Journal of the National Cancer Institute* monograph summarizes the 2002 NIH state-of-the-science conference on Symptom Management in Cancer: Pain, Depression, and Fatigue. An expert panel concluded that the available evidence supports a variety of interventions for treating cancer patients' pain, depression, and fatigue. Clinicians should routinely use assessment tools to ask patients about these symptoms and initiate evidence-based treatments. Assessment should include regular discussions about common symptoms experienced by cancer patients. Barriers to successful symptom management include incomplete effectiveness of some treatments, a lack of knowledge about treatment strategies, patient reluctance to report symptoms to caregivers, a belief that such symptoms are simply a part of the cancer experience that must be tolerated, and inadequate insurance coverage and reimbursement for some treatments. For additional information, go to http://jncicancerspectrum.oupjournals.org/jncimono/.

Rosenberg Discusses Immunotherapy

Dr. Steven Rosenberg, chief of the Surgery Branch at NCI's Center for Cancer Research (CCR), delivered the CCR Grand Rounds lecture on July 20. He discussed the development of promising immunotherapy treatments for cancer patients, particularly those that rely on transfer of lymphocytes that recognize and attack tumor cells. Unlike chemotherapy, Dr. Rosenberg noted, this kind of treatment continues to expand inside the body because successfully transferred tumor-infiltrating lymphocytes "grow explosively in the patient." Using examples from his research, Dr. Rosenberg demonstrated the goals and challenges ahead for immunotherapy.

Thorgeirsson Receives Membership to Hungarian Academy of Sciences

Dr. Snorri S. Thorgeirsson, chief of the Laboratory of Experimental Carcinogenesis in NCI's Center for

Cancer Research, recently received an honorary foreign membership to the Hungarian Academy of Sciences. Dr. Mihaly Kokeny, Hungarian Minister for Health, Social and Family Affairs, and Zsuzsanna Jakab, Hungarian State Secretary for Health, Social and Family Affairs (shown above at right with Dr. Thorgeirsson and Dr. Andrew von Eschenbach) visited the NIH campus on July 9 to offer their personal congratulations. Dr. Thorgeirsson joined NCI in 1976; his research interests are centered on the elucidation of the molecular pathogenesis of human liver cancer, application of transgenic mouse models for human cancers, and stem cell biology of liver cancer.

H&R Block Co-Founder Richard Bloch Dies; Early Supporter of Clinical Trials

Richard Bloch, 78, co-founder of the H&R Block tax preparation company, died of a heart ailment on July 21. In 1978, Mr. Bloch was diagnosed with terminal lung cancer, but after 2 years of aggressive treatment, he was cured. He and his wife Annette went on to found the R.A. Bloch Cancer Foundation in 1980 in Kansas City and donated to programs for cancer patients and survivors of the disease. Mr. Bloch served on the National Cancer Advisory Board and was a member of the Institute of Medicine and the President's Circle of the National Academy of Sciences.

Said Dr. Vincent T. DeVita, Jr., former NCI director and director of the Yale Cancer Center, "Richard Bloch was a real warrior. He set an example for cancer patients everywhere by not taking 'no' (I can't do anything for you) for an answer. He spent his life, after his first diagnosis of lung cancer 25 years ago—when told he had only months to live—trying to set up mechanisms for cancer patients to get independent second opinions, to assure access to the latest treatment. He fell in love with the concept we had for the PDQ system, and contributed time, energy, and his own resources in helping us build it."

Armstrong Wins Sixth Tour de France, Tour of Hope to Start in October

On July 25, cyclist and cancer survivor Lance Armstrong earned his sixth

consecutive Tour de France victory. Since his diagnosis of testicular cancer in 1996, Armstrong has been a prominent advocate for cancer research and survivorship issues. In 2002, President Bush appointed him to the President's Cancer Panel. Armstrong teamed with Bristol-Myers Squibb to organize the Tour of Hope, a cross-country cycling journey to invigorate and inform the public about the importance of participating in cancer research. The 2004 Tour of Hope will begin in Los Angeles and conclude in Washington, D.C. More information is available online at www.tourofhope.org. ◆

Featured Meetings

This is a list of selected scientific meetings sponsored by NCI and other organizations. For locations and times and a more complete list of scientific meetings, including NCI's weekly seminars and presentations open to the public, see the NCI Calendar of Scientific Meetings at http://calendar.cancer.gov.

NCI Advisory Committee Upcoming Meetings

Date	Advisory Committee
August 30	President's Cancer Panel

Selected Upcoming Meetings of Interest

Date	Meeting	Speakers
July 28-29	Research Strategies, Study Designs and Statistical Approaches to Biomarkers Validation for Cancer Diagnosis and Detection	Dr. Peter Greenwald, Director, Division of Cancer Prevention; Dr. Anna Barker, Deputy Director, Advanced Technologies and Strategic Partnerships; Dr. Sudhir Srivastava, Chief, Cancer Biomarkers Research Group, Division of Cancer Prevention; Dr. Richard Simon, Chief, Biometric Research Branch, Division of Cancer Treatment and Diagnosis; Dr. Stuart G. Baker, Biometry Research Group, Division of Cancer Prevention
July 29	Annual Advances in Cancer Prevention Lecture: Convergence of Molecular Targets for Cancer Prevention and Therapy	Dr. Andrew C. von Eschenbach, Director; Dr Waun Ki Hong, Professor/Chair, Department of Thoracic/Head and Neck Medical Oncology, University of Texas M.D. Anderson Cancer Center
July 31-August 5	102nd Annual Convention and Scientific Assembly of the National Medical Association	Dr. Mark Clanton, Deputy Director, Cancer Care Delivery Systems

NCI Exhibits

NCI Exhibits are presented at various professional and society meetings. Further information about the NCI Exhibits program can be found at http://exhibits.cancer.gov.

This *NCI Cancer Bulletin* is produced by the National Cancer Institute (NCI). NCI, which was established in 1937, leads a national effort to eliminate the suffering and death due to cancer. Through basic and clinical biomedical research and training, NCI conducts and supports research that will lead to a future in which we can prevent cancer before it starts, identify cancers that do develop at the earliest stage, eliminate cancers through innovative treatment interventions, and biologically control those cancers that we cannot eliminate so they become manageable, chronic diseases.

For more information on cancer, call 1-800-4-CANCER or visit http://cancer.gov.

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