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Breast Cancer Test May Aid Patients with Affected Lymph Nodes

A genomic test may help some women with early-stage breast cancer gauge the risk of a recurrence and the potential benefit of additional chemotherapy even when the disease has spread to the lymph nodes, researchers are reporting.

The test, OncotypeDX, profiles the activity of 21 genes in a tumor and quantifies the risk of a recurrence over 10 years, assuming the patient receives 5 years of hormonal therapy such as tamoxifen.

Many physicians have used the test to help identify women with estrogen receptor (ER)-positive disease that has not spread to the lymph nodes whose risk of a recurrence is so low that they might not benefit from additional chemotherapy after surgery.

Now, researchers say the test could also predict which postmeno-

(continued on page 2)

And the Survey Says…

Click here to see the results of the 2007 *NCI Cancer Bulletin* reader survey. ◆

Director's Update

Making Progress in Difficult Times Will Require a Collective Effort

"No individual is alone responsible for a single stepping stone along the path of progress." This remark by Nobel Prize winner Ernest Lawrence comes to mind as we take stock of all that happened during this past year in cancer research.

In 2007, NCI put on full display the teamwork, collaborative effort, and maturation of scientific knowledge that, even in a time of constrained resources, helped ensure steady progress—with one discovery building on another. Certainly the Institute was forced to make some tough choices in order to redirect a less-than-inflation allocation of federal dollars toward our highest priority programs. Even with those limited resources, NCI's scientific accomplishments this past year were, to say the least, impressive.

In 2007, our genome-wide association studies (GWAS) validated and placed a remarkable amount of data into the public domain. GWAS is a truly collective effort that pools data from researchers studying large patient cohorts in order to identify common genes that confer modest amounts of cancer risk. These germline sites in our DNA, which are predictive of increased risk, act collectively, not alone. GWAS studies will help identify new environmental factors and biological mechanisms of

(continued on page 2)

(Breast Cancer Test continued from page 1)

pausal women with node-positive, ER-positive disease would benefit from adjuvant chemotherapy and define a group for whom chemotherapy does not appear to be beneficial.

"This test allows physicians to discover the biologic profile of an individual cancer and treat the patient accordingly," said Dr. Kathy Albain of the Cardinal Bernardin Cancer Center of Loyola University Chicago, who presented the findings last week at the San Antonio Breast Cancer Symposium. The test could be an aid right now in making treatment decisions for certain patients, but should be used selectively, she said.

The study, led by the Southwest Oncology Group, used tumor samples from 367 women who had been treated either with tamoxifen alone or with anthracycline-based adjuvant chemotherapy followed by tamoxifen. A high "recurrence score" predicted a high risk of recurrence and a large benefit from chemotherapy, while a low recurrence score identified a group of women who did not seem to benefit from the added chemotherapy.

Even though the test identified a group with the lowest risk of recurrence in the study sample, there still was a 40 percent rate of recurrence at 10 years in the subset. "This tells us that these patients with positive nodes and low recurrence scores need a different treatment strategy that will improve the 10-year outcomes," said Dr. Albain.

The results confirm previous studies involving node-negative disease and slightly different chemotherapy regimens. "A general picture is emerging that this test is able to distinguish patients who appear to likely benefit from chemotherapy," said Dr. Peter

(continued on page 5)

(Director's Update continued from page 1)

disease as we layer onto GWAS data the genetic changes that accumulate during one's life. These genetic data, carefully analyzed and constructed, will be valuable resources in identifying new prevention and treatment strategies. GWAS studies published this year—several sponsored by NCI's Cancer Genetic Markers of Susceptibility project—identified common genetic variants that show increased risk of developing breast, prostate, and colorectal cancers, along with one germline region that appears to be protective against the development of breast cancer.

In another important area of cancer research, cancer biologists this year worked to test the hypothesis that within each tumor there is a small subpopulation of cells with the genetic properties of tissue stem cells. Some refer to this population as "cancer initiator" cells, and evidence supports their potential importance both in the resistance of tumors to therapy and in the process of metastasis. Therapeutic approaches that specifically target this subpopulation of cells are now being combined with standard anticancer regimens. Early clinical trials include a compound called DMAPT that NCI's Rapid Access to Intervention Development program is helping researchers to investigate, through an approach that "awakens" these quiescent cells to make them more sensitive to existing therapies.

Representing a highly leveraged team project was the launch in June of the NCI Community Cancer Centers Program (NCCCP). Focusing on underserved communities and groups that are disproportionately affected by the disease, the NCCCP's pilot phase involves 16 community hospitals working with NCI to identify the best research-driven strategies for delivering state-of-the-art cancer care in the community, where the large majority of cancer patients receive care close to home. The research conducted through NCCCP will help NCI bring early-phase clinical trials to such settings, explore development of electronic medical records, and enhance our ability to practice highly personalized cancer care. The ultimate goal is to ensure that all people, no matter where they live, no matter what their education or economic status, will have equal access to our latest science.

There was no absence of significant clinical advances this year, including the introduction of the phase 0 clinical trial at the NIH Clinical Research Center. Made possible by an extensive NCI-FDA partnership that resulted in the creation of the FDA Exploratory IND Guidance, these early studies use pharmacodynamic measurements or imaging to find the biologically effective dose for first-in-human studies of newly developed therapeutics. This new approach has already demonstrated its ability to significantly shorten the drug discovery process.

Another important clinical trial highlighted the significant contributions of imaging to cancer diagnosis and care, demonstrating that adding MRI to standard mammograms detects virtually all cases of contralateral breast cancer. A separate patient study provided a potentially important clarification about the use of finasteride to prevent prostate cancer in high-risk men.

We continue to make progress against specific forms of cancer. For example, this year began a new era for the treatment of advanced liver cancer, which had previously been impervi-

(continued on page 5)

Cancer Research Highlights

Childhood Cancer Death Rates Decline

Improvements in the treatment of childhood leukemias have contributed to a decline in cancer death rates among U.S. children and adolescents from 1990 to 2004, researchers from the U.S. Centers for Disease Control and Prevention reported in the December 7 *Morbidity and Mortality Weekly Report*.

"The good news is that the overall cancer death rates decreased significantly during this period in boys and girls, children and adolescents, most racial and ethnic groups, and all U.S. Census regions," said co-author Dr. Jun Li.

Using data from the National Vital Statistics System, the researchers identified 2,223 cancer deaths among children and adolescents in 2004, compared with 2,457 in 1990. Adjusted for population growth, this translates into 27.3 cancer deaths per million in 2004 versus 34.2 deaths per million in 1990. In 2004, leukemia was the leading cause of childhood cancer deaths, followed by brain and other cancers of the nervous system. Together, these accounted for more than 50 percent of the deaths.

"We really have made a lot of strides in treating leukemias, and this is reflected in the improvements we are seeing," said co-author Dr. Loria Pollack. She noted, however, that children are still dying from these devastating diseases and more progress is needed.

Between 1990 and 2004, death rates for leukemias declined by 3 percent per year, for brain and other nervous system cancers by 1 percent per year, and for all other cancers combined by 1.3 percent per year. Meanwhile, incidence rates for all childhood cancers increased by 0.6 percent per year from 1975 to 2002. Cancer is the fourth-leading cause of death among children and adolescents, after accidents, homicides, and suicides.

The analysis revealed some disparities. Hispanics and non-Hispanics had similar childhood cancer death rates in 1990, but these rates declined more rapidly for non-Hispanics than Hispanics between 1990 and 2004. Lack of health insurance and access to health care may be factors, but differences in tumor aggressiveness, cancer stage at diagnosis, and response to treatment also should be considered, the researchers said.

Mediterranean Diet and Physical Activity Associated With Lower Death Rates

Separate analyses from the NIH-AARP Diet and Health Study indicated significant reductions in the overall death risk for people who adhere to the so-called "Mediterranean diet" as well as among those who engaged in physical activity levels suggested by national exercise guidelines, according to two studies published in the December 10/24 *Archives of Internal Medicine*.

The NIH-AARP study was developed by an NCI research team that is now part of the Division of Cancer Epidemiology and Genetics (DCEG). The study monitored the health status of more than 500,000 AARP members in the U.S. aged 50–71 from 1995 to 2005 using mailed questionnaires, death records, and tumor registry data.

In the first study, researchers used a 9-point scale to assess adherence among 380,296 healthy AARP members to the Mediterranean dietary pattern, which includes high intake of vegetables, legumes, fruits, nuts, whole grains, fish, higher intake of monounsaturated than saturated fat, moderate alcohol consumption, and low red meat intake. The dietary pattern was associated with a 21-percent decreased risk of all-cause mortality (17 percent for cancer deaths and 22 percent for cardiovascular deaths) in men, and a 20-percent decreased risk of all-cause mortality (12 percent for cancer deaths and 19 percent for cardiovascular deaths) in women. The beneficial effect of the Mediterranean dietary pattern was more pronounced in smokers, especially those with a healthy body mass index.

In the second study, researchers examined the effect of adherence to national guidelines for both "moderate" and "vigorous" physical activity among 252,925 AARP members. Compared with inactive, sedentary respondents, people who engaged in moderate exercise (at least 30 minutes, most days of the week) had a 27-percent decrease in overall mortality, and those who exercised vigorously (at least 20 minutes, three times a week) reduced their death risk by 32 percent.

"Our findings strongly confirm the importance of these national physical activity guidelines," noted study leader Dr. Michael Leitzmann of

(continued on page 4)

(Highlights continued from page 3)

DCEG's Nutritional Epidemiology Branch. A secondary finding showed that even those individuals who engaged in physical activity at less than the guideline recommendations had a reduced mortality risk.

DCEG is pursuing additional research on physical activity, Dr. Leitzmann added. "We're now drilling down to the effect of exercise on specific forms of cancer. Those impacts may differ from that on total mortality," he said.

Allogeneic Transplant Does Not Increase Survival in High-Risk ALL

In a collaborative clinical trial from the UK Medical Research Council and the U.S. Eastern Cooperative Oncology Group, adult patients with standard-risk Philadelphia-chromosome-negative acute lymphoblastic leukemia (ALL) had significantly increased overall survival after high-dose, chemotherapy-induced first remission followed by allogeneic stem cell transplantation. However, while patients with high-risk ALL had a decrease in the risk of relapse with allogeneic transplantation, their overall survival did not significantly increase, due to the high rate of transplant-related mortality.

"Surprising though it might appear, the high-risk patients benefit less from having a donor than the standard-risk patients in terms of overall survival," state the authors in their paper published online November 29 in *Blood*. "This is an important finding since there is often a view that high-risk patients should go immediately to allogeneic transplant."

The trial also tested autologous (self) transplantation versus maintenance chemotherapy for patients who did not have a matched sibling donor available for allogeneic transplantation. Unmatched patients who went into remission after the initial high-dose chemotherapy were randomly assigned to receive either autologous transplantation or 2.5 years of maintenance chemotherapy.

Those patients receiving chemotherapy had significantly improved overall survival compared with patients undergoing autologous transplantation, and there was no significant difference in nonrelapse (i.e., treatment-related) mortality between the two groups. However, in an analysis comparing all patients with a donor versus those without a donor, those with a donor had better overall survival rates.

"Sibling donor allogeneic transplant is the treatment of choice for adults with standard-risk ALL in remission providing the greatest chance for a long-term survival. Autologous transplant has a less favorable outcome than consolidation/maintenance chemotherapy for those without a donor," conclude the authors.

Trials Demonstrate Investigational Compound's Chemoprevention Potential

A combination of the investigational compound DFMO with low doses of the anti-inflammatory agent sulindac may be a powerful chemopreventive approach in people at high risk of developing colorectal polyps, researchers reported last week.

The combination of the two drugs significantly decreased the formation of new colon polyps, including advanced polyps, compared with placebo. The 375 participants in the phase III, double-blind, randomized trial all had previously had colon polyps removed.

The results were presented during a session on cancer prevention clinical trials at the American Association for Cancer Research's (AACR) fourth annual Frontiers in Cancer Prevention Research meeting in Philadelphia.

The trial was stopped early, following a recommendation of its Data Safety Monitoring Board, because its primary goals had been met, explained lead investigator Dr. Frank L. Meyskens from the University of California, Irvine. Toxicities—including audiologic toxicities, a concern raised in earlier studies of DFMO—were minimal and similar between the two trial arms.

Results from a subgroup analysis of a different phase III trial investigating DFMO for the prevention of nonmelanoma skin cancer were also presented at the same AACR meeting session, demonstrating a significant protective effect against basal cell carcinoma.

Bortezomib Tested as First-Line Treatment for Multiple Myeloma

At last week's annual meeting of the American Society of Hematology, researchers announced results of several phase III European clinical trials testing the drug bortezomib (Velcade) as a first-line treatment for multiple myeloma. Bortezomib is currently approved in the U.S. as a second-line treatment for the disease.

One multicenter study involved 482 patients who were randomized to receive either a combination of bortezomib and dexamethasone or a combination of vincristine, doxorubicin, and dexamethasone, followed by transplantation with allogeneic stem cells. The results showed that 21 percent of patients who received

(continued on page 5)

(Highlights continued from page 4)

the bortezomib regimen went into complete disease remission before transplantation, whereas only 8 percent did so in the control group. Of the 404 patients who went on to receive stem cell transplantation, 41 percent in the bortezomib group were in complete remission, compared with 29 percent in the control group.

Another study included 256 patients who were randomized to receive bortezomib, thalidomide, and dexamethasone, or thalidomide and dexamethasone alone. Patients in the test group showed 36 percent complete remission before stem cell transplantation, whereas 9 percent of patients had complete remission in the control group. After stem cell transplantation, the complete remission rates were 57 percent versus 28 percent, respectively.

A third study, named VISTA, involved 682 patients who were ineligible for allogeneic stem cell transplantation. In the test group, which received bortezomib, melphalan, and prednisone, 35 percent of patients went into complete remission, compared with 5 percent in the control group who received melphalan and prednisone alone. The bortezomib group also saw a 40-percent lower risk of death compared with the control group. ◆

Funding Opportunities

For a complete listing of current NCI funding opportunities, please go to the HTML version of today's NCI Cancer Bulletin at http://www.cancer.gov/ncicancerbulletin/NCI_Cancer_Bulletin_121807/page7. ◆

(Breast Cancer Test continued from page 2)

Ravdin of the University of Texas M.D. Anderson Cancer Center and a coauthor of the abstract. "And that's exciting."

Many in the field have wondered whether all node-positive breast cancers are the same or whether physicians should be trying to individualize treatment. "This study showed that even in node-positive breast cancer, all women do not benefit equally from chemotherapy," said coauthor Dr. Steven Shak of Genomic Health, which makes the test.

The findings support the fact that biology is the most important predictive factor for a benefit from chemotherapy since the recurrence scores are predictive in patients with both node-positive and node-negative disease, said Dr. Sandra Swain of the Washington Cancer Institute at the Washington Hospital Center in the District of Columbia, who attended the presentation.

"It's very exciting to have a test like this," she added. "We are beginning to home in on the true biology of the tumor and think critically about which patients need treatment."

The study was small and needs to be confirmed. More research is also needed to determine whether commonly available biological markers such as the gene *HER2/neu* and the estrogen receptor could provide essentially the same information about responsiveness to chemotherapy as the gene signature, according to Dr. Ravdin.

Classical biological factors might be a simpler and less expensive way to achieve the same result, said Dr. Ravdin, noting that the test costs approximately $3,500. "We owe it to our patients to explore this question further."

The researchers plan to publish the findings next year, including data on the use of combinations of classical biological markers in these patients. ◆

By Edward R. Winstead

(Director's Update continued from page 2)

ous to new treatments. In yet another difficult-to-treat cancer type, small-cell lung cancer, researchers demonstrated that prophylactic cranial irradiation not only reduced the risk of symptomatic brain metastases, it also improved survival.

In financially constrained times, such as the NIH has experienced over the past 4 years, we are placing a greater emphasis on collaboration and finding ways to leverage scarce resources through cooperative external investment. None of that would be possible without NCI's senior leadership, who time and again this year worked together to make difficult funding and priorities decisions. These decisions were made with the utmost integrity, based on a belief that, regardless of the challenges or obstacles before us, we must work even harder—certainly with more collaboration and innovation—to support the best science. In 2008, we will continue moving forward one stepping stone at a time as we navigate this path on behalf of our patients. ◆

Dr. John E. Niederhuber
Director, National Cancer Institute

Spotlight

Cervical Cancer Screening Approach Slowly Shifting

Ask Dr. Mark Schiffman about the strategy behind screening for cervical cancer and he'll tell you it boils down to one thing.

"It all comes back to an underlying knowledge of persistence," explains Dr. Schiffman, from NCI's Division of Cancer Epidemiology and Genetics, and one of the world's foremost experts on cervical cancer and its cause, the human papillomavirus (HPV). "We only want to catch persistent infections."

The reason is simple: It's the persistent infections with 1 of approximately 15 "oncogenic" types of HPV that are responsible for virtually all cases of cervical cancer worldwide. In the vast majority of cases, however, HPV infections, and any associated cervical lesions, make only a cameo appearance before being suppressed or dispatched by the immune system. This is particularly true in women under 30, who are typically more sexually active and thus at higher risk than older women for new and multiple HPV infections. (Brief HPV infections are the most common sexually transmitted infections.)

With this knowledge and the results of a number of studies over the past several years, experts on cervical cancer and HPV have begun to shift their thinking about the best way to weed out persistent infections via screening. The studies—including three published in October—have suggested that testing women 30 or older every few years for the presence of HPV using a DNA test may be a more clinically effective option than what has almost become a ritual for many American women, an annual Pap test.

But, when the time comes—and consensus is mounting that eventually it will—the switch, says Dr. Schiffman, will have to be done very carefully.

"We're not talking about abandoning a poor strategy for a good one," he says. "We're talking about moving from a very good strategy to an even better one."

Taking Advantage of Persistence

Heralded by some as the single most successful cancer prevention technique ever developed, annual Pap screening has cut cervical cancer rates in the U.S. by more than half since it came into widespread use in the 1960s, and it has had equal success in other, primarily developed countries with organized national screening programs.

The persistence factor also lies at the root of the Pap's success. For any single test, the Pap is not particularly sensitive in detecting underlying, persistent HPV infection or precancer. But when performed annually, typically as part of a routine gynecologic check-up, the Pap test eventually catches most precancerous lesions before they become life threatening.

The need for such regular testing, however, has been criticized.

"Compensating for the poor sensitivity of cytology through frequent screening makes it difficult to assure that all women at risk are properly screened," wrote Dr. Thomas C. Wright of Columbia University in a recent commentary. Of the 10,000 cervical cancer diagnoses each year, he noted, half are in women who have not had a recent Pap test. The cost-effectiveness of such frequent testing also has been challenged.

Studies have consistently demonstrated that the HPV DNA test—of which only one is currently approved by the FDA—has a very high sensitivity, meaning a negative result provides great assurance that no dangerous infection is present.

But the concern with the HPV DNA test, which is more expensive than the Pap test, is exactly how to address positive results on a single test—results that usually represent a transient, and thus harmless, infection.

"It might mean a single HPV test doesn't refer to colposcopy," says Dr. Diane Solomon, from NCI's Division of Cancer Prevention, a co-author of a recently released risk-assessment guide for cervical cancer. During colposcopy, clinicians can more closely examine the cervix for lesions and, if necessary, take a biopsy. "Two positive HPV DNA tests a certain length of time apart might be required before triggering colposcopy. Such a strategy would capitalize on the increased sensitivity provided by HPV testing while targeting persistence."

The Interval Is the Thing

This leads to a subject researchers are now more closely investigating: screening intervals. In other words, how long should a woman who tests HPV-negative wait before being tested again?

"It hasn't been published how long this 'protection' [from risk of a positive result] lasts," says Dr. Carolyn Runowicz, director of the Carole and

(continued on page 7)

(Spotlight continued from page 6)

Ray Neag Comprehensive Cancer Center in Connecticut and a gynecologic oncologist. "Can you go 3 years or 5 years? We need to work that out. We need to wait for the data from serial and longer follow-up periods."

The Kaiser Permanente's Northern California Region has spearheaded the movement toward longer screening intervals using HPV testing. In 2004, the region became the first health plan in the nation to offer—but not require—the HPV DNA test as front-line screening to all women 30 and older, but only in combination with the Pap test, which is consistent with its FDA-approved indication. It's also approved for use as a triage test after an "equivocal" Pap result.

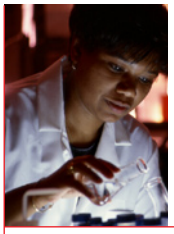
Women who are negative on both tests do not undergo cervical cancer screening again for 3 years. A Pap-negative/HPV-positive result, on the other hand, elicits a recommendation for retesting 12 months later. If they get the same result, colposcopy is recommended.

Expanding the testing intervals for women who are negative on both screens has worked well, says Kaiser's Dr. Walter Kinney. "More than 90 percent of our members opt for both tests at 3-year intervals instead of annual Pap smears," he says.

It's too soon after initiating the dual-test approach to know if it has affected the Kaiser region's incidence rates. And Dr. Kinney and his colleagues have not reviewed the number of advanced cervical lesions detected using the combination approach since 2005. However, he says, they hope to receive approval from Kaiser's Institutional Review Board to do so next year.

"We have been very pleased with this approach," Dr. Kinney says, "and at no point have we contemplated moving away from it." ◆

By Carmen Phillips



Featured Clinical Trial

Treating Hereditary Thyroid Cancer in Children

Name of the Trial
Phase I/II Study of Vandetanib in Young Patients with Hereditary Medullary Thyroid Carcinoma (NCI-07-C-0189). See the protocol summary at http://cancer.gov/clinicaltrials/NCI-07-C-0189.

Principal Investigators
Dr. Frank Balis, NCI Center for Cancer Research, and Dr. Samuel Wells, Washington University, St. Louis

Dr. Frank Balis

Why This Trial Is Important
Medullary thyroid carcinoma (MTC) is a rare type of thyroid cancer, representing about 2–3 percent of thyroid cancer cases. Although MTC usually occurs in people who have no family history of the disease, about 25–40 percent of cases are hereditary. Hereditary MTC is associated with group of genetic disorders that are caused by inherited mutations in the *RET* gene. People with these disorders usually develop MTC as children or young adults.

Surgery is the only curative therapy for patients with hereditary MTC. Patients whose tumors cannot be surgically removed (unresectable) or that recur following surgery need new treatment options.

In this trial, doctors are testing a new drug called vandetanib (Zactima) in young patients with advanced hereditary MTC. Vandetanib blocks the activity of the protein produced by the *RET* gene. Researchers believe that inhibiting the activity of the RET protein may cause tumors to shrink and reduce the levels of tumor biomarkers in patients with MTC. Besides looking for these treatment effects, doctors will assess the safety and the pharmacokinetics of vandetanib in these patients.

"MTC is the most common cause of death in patients with these genetic disorders, and the disease is relatively unresponsive to radiation therapy and standard or novel chemotherapeutic regimens," said Dr. Balis. "Vandetanib, unlike standard chemotherapy or radiation, specifically targets the genetic defect responsible for the development of these tumors."

Who Can Join This Trial
Researchers seek to enroll 21 patients aged 5–18 with hereditary MTC that cannot be removed surgically, has recurred, or has metastasized (spread). See the list of eligibility criteria at http://cancer.gov/clinicaltrials/NCI-07-C-0189.

Study Site and Contact Information
This study is taking place at the NIH Clinical Center in Bethesda, MD. For more information, call the NCI Clinical Trials Referral Office at 1-888-NCI-1937. The toll-free call is confidential. ◆

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

Notes

NCI Issues Web-Based Resources for Tracking Cancer Trends

NCI has released the *Cancer Trends Progress Report: 2007 Update (CTPR)* and the first phase of a Web site developed by the Cancer Intervention and Surveillance Modeling Network (CISNET) featuring colorectal cancer mortality projections. The two online resources are linked where data are presented on colorectal cancer and mortality. Useful to policy makers, program planners, and other decision makers, they provide new tools to understand cancer trend data overall and how different intervention strategies influence future trend projections in colorectal cancer mortality.

The *CTPR* is available online at http://progressreport.cancer.gov/. Questions about the report can be directed to progressreporthelp@mail.nih.gov. The Colorectal Cancer Mortality Projections Web site can be viewed at http://cisnet.cancer.gov/projections/colorectal. Questions about the Web site can be directed to srab@imsweb.com.

Tumor Microenvironment Web Site Launched

NCI recently launched the Tumor Microenvironment Network (TMEN) Web site, which provides information on NCI's initiative to expand understanding of the role of tumor microenvironments in cancer initiation, progression, and metastases. Ten funded programs form TMEN, an infrastructure designed to establish, promote, and facilitate interdisciplinary collaboration and progress in understanding the role of host stroma in the formation of tumors. Information about the initiative, its 10 programs, and related meeting and conference announcements is included on the site.

NCI Cancer Bulletin Wins Award

The *NCI Cancer Bulletin* recently received a 2007 MarCom Gold Award in the e-newsletter category.

The MarCom Awards is an international creative competition that recognizes outstanding achievement in marketing and communications. It is administered and judged by industry experts from the Association of Marketing and Communication Professionals. This year there were more than 5,000 entries from across the nation and several foreign countries.

The MarCom Award marks the second award received by the newsletter this year. In the summer, the *Bulletin* was recognized with a Gold Hermes Award for Communications.

NCI Personnel Changes Announced

Dr. Robert Yarchoan has been named the director for the NCI Office of HIV and AIDS Malignancies, located in the Office of the Director. This office is a trans-NCI effort to coordinate, prioritize, and facilitate the research effort in HIV and AIDS malignancies. In addition to taking on this new leadership responsibility, Dr. Yarchoan continues as chief of the HIV and AIDS Malignancy Branch in the Center for Cancer Research.

NCI Cancer Bulletin Publication Break

Because today's issue is the last one of the year, the editors and writers of the *NCI Cancer Bulletin* would like to wish all of our readers a happy and healthy holiday season. We will resume publication on our usual biweekly schedule with the January 8, 2008 issue. ◆

In the Division of Cancer Control and Population Sciences, there are four new branch chiefs. In the Behavioral Research Program, Dr. Cathy Backinger has been named chief of the Tobacco Control Research Branch, and Dr. Paige McDonald has been named chief of the Basic and Biobehavioral Research Branch. In the Epidemiology and Genetics Research Program, Dr. Mukesh Verma is the new chief of the Methods and Technologies Branch, and Dr. Britt Reid is the new chief of the Modifiable Risk Factors Branch. ◆

If Memory Serves...

In the decade after the National Cancer Institute Act was passed in 1937, Public Health Service laws were rewritten to include more authority for research, grants, and training at NIH, as well as a clinical center. Subsequently, half a dozen new institutes were developed for other categories of health research, each in the model of NCI, thus pluralizing NIH. ◆

For more information about the birth of NCI, go to http://www.cancer.gov/aboutnci/ncia.

Guest Commentary by First Lady Laura Bush

Raising Breast Cancer Awareness in the Middle East

This October, I spent a week in the Middle East to promote breast cancer awareness and early detection. My travels took me to the United Arab Emirates (UAE), Saudi Arabia, Kuwait, and Jordan, where I met with government officials, leaders of medical and educational institutions, and prominent women's-rights activists.

The trip was an opportunity to bring the United States and the countries of the Middle East closer together by addressing the shared challenges facing women. Twenty-five years ago in the United States, breast cancer was a taboo subject. Because women didn't talk about the disease, they didn't benefit from early detection, which is the closest thing we have to a cure. Today, the situation facing women in the Middle East is similar. And through the U.S.-Middle East Partnership for Breast Cancer Awareness and Research, American women and Middle Eastern women are sharing their experiences and expertise to save the lives of women everywhere.

The U.S.-Middle East Partnership joins medical communities in Saudi Arabia, Jordan, and the UAE with the medical expertise of the University of Texas M.D. Anderson Cancer Center. This partnership will benefit from the educational resources of Susan G. Komen for the Cure and the commitment of the U.S. State Department.

Breast cancer is personal for me. Both my grandmother and my mother had breast cancer. Thankfully, they both survived their illnesses, and my mother is alive and healthy today because she detected her cancer

early. Like many American women, she benefited from improved screening programs and increased public awareness. Today, 70 percent of breast cancer cases in the United States are diagnosed early, when they are much easier to treat. But in the Middle East, 70 percent of breast cancer cases are not detected until they reach stages 3 or 4.

In the Middle East, breast cancer comes with a heavy cultural stigma. Women are sometimes abandoned by their husbands when the disease is diagnosed. Such stories are discouraging, but on my trip, I was inspired by many more stories of hope. I met one woman whose husband and sons shaved their heads in solidarity with her while she underwent treatment. Other women who have been treated successfully are now involved in outreach and education campaigns to change the social norms in their communities.

In Abu Dhabi I visited the Pink Majlis, a forum for important discussions where breast cancer patients at Sheikh Khalifa Medical City are educated about the disease. And in Dubai, I helped launch the "Making It Our Business: Breast Cancer Awareness" program. Eleven companies, both American and Emirati, signed on as charter members, pledging to educate their employees, families, and customers about breast cancer.

In Riyadh, Saudi Arabia, I visited the Abdul-Latif Cancer Screening Center, which has just installed state-of-the-art facilities. And at the King Hussein Cancer Center in Amman, Jordan, I announced that the U.S.-Middle East Partnership will expand to Morocco, the Palestinian territories, and Egypt next year.

Through this historic partnership, these countries and medical institutions will share discoveries and data that can lead to world-class cancer research. New and better treatment options for breast cancer can come from a researcher in Washington, a biologist in Amman, or a young doctor in Riyadh. Wherever these options are discovered, they will help women in the Middle East, the United States, and countries around the world live long and healthy lives. ◆

To learn about NCI's international cancer research efforts, go to http://oia.cancer.gov/ and http://www.cancer.gov/nci-international-portfolio. ◆