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New Study Reveals Genotype that Causes SSRI Interference with Tamoxifen

In a follow-up to their late-2003 study showing that the selective serotonin uptake inhibitor (SSRI) paroxetine can decrease the metabolism and efficacy of tamoxifen, researchers have now pinpointed genotypes that are linked with this effect, as well as other SSRIs that cause the same result.

Their findings, published in the January 5 *Journal of the National Cancer Institute* (*JNCI*), come from 80 women newly diagnosed with breast cancer and starting tamoxifen treatment. Twenty-four in this group were also taking SSRIs—including paroxetine, fluoxetine, sertraline, citalopram, and venlafaxine.

Previous studies have shown that when tamoxifen is broken down, the resulting molecules are as much as 100 times more powerful at blocking estrogen receptors and thereby exerting a cancer-inhibitive effect. The keys to breaking it down, however, are enzymes in the cytochrome P (CYP) group, including CYP2D6, which can be blocked by some SSRIs.

After genotyping the women in this study, monitoring their medication history, and testing their blood for plasma levels of tamoxifen and its metabolites, the team found that nonfunctional polymorphisms in either one or both copies of CYP2D6 are associated with SSRI use and low tamoxifen activity. Compared with

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Director's Update

NCI Leadership: A Model for Success

Last week in this space I provided a general overview of how we are recasting NCI's leadership structure, creating a management team headed by four deputy directors with whom I will work to guide NCI and the national cancer program through the exciting and demanding times ahead. This week I would like to provide a little more detail about NCI's leadership structure, to give further insight into how we make the decisions that will enable researchers to continue to make discoveries that are improving cancer patients' lives every day.

While the deputy directors play a central role in integrating NCI's many components, the institute's division and center directors have full managerial and executive responsibility for their operational units. They manage the resources under their purview and are accountable for all initiatives and activities in their respective areas.

The NCI Executive Committee (EC) includes the deputies, division directors, and center directors. The EC meets twice a month and conducts much of the executive function associated with the operational and business aspects of NCI. This includes managing the grants payline, reviewing new and recompeting concept

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women with two functional copies of the gene, those with one nonfunctional copy showed a 45 percent lower plasma level of tamoxifen metabolites, and those with two nonfunctional copies had levels that were significantly lower.

The research team also found that the stronger the SSRI's inhibitive effect on CYP2D6, the lower the plasma level of tamoxifen metabolites, with paroxetine having the strongest effect in this regard.

"We've withheld clinical recommendations, because at this point we don't have outcome data," said lead author Dr. David A. Flockhart of Indiana University School of Medicine. In the article, however, he and the other authors state that "knowledge of a drug's ability to inhibit CYP2D6 enzyme activity may help clinicians to anticipate important drug interactions" and that genetic testing "may help identify a group of women who may experience greater benefit from tamoxifen and/or who might benefit more from one SSRI over another."

After 25 years on the market, tamoxifen is one of the most widely prescribed treatments for hormone receptor-positive breast cancer at all stages. According to the drug's manufacturer, the duration and penetration of its use equals more than 10 million patient years.

But tamoxifen doesn't work for everyone; just over one-third of women who have advanced tumors do not respond to it, and tumors eventually develop a resistance to it.

One of the side effects of tamoxifen is hot flashes, which occur two to three times more often among women who are taking the drug than among those who do not. SSRIs, which are most often prescribed as antidepressants, are also prescribed to help prevent these hot flashes, a trend that Dr. Flockhart says appears to be increasing.

"In this trial, the number of women taking SSRI antidepressants completely surprised us," he said. "We thought it would be closer to a tenth, but instead it was 28 percent of the group. The SSRIs are important to a lot of women who find the hot flashes really debilitating."

This research, which was funded in part by the National Institute of General Medical Sciences Pharmacogenetics Research Network, does not include outcomes of the genotype and SSRI use. However, the authors presented early data from another study at the 27th Annual San Antonio Breast Cancer Symposium, in December 2004, that show an effect of the genotype on disease-free survival. A paper on this study is currently in review by *JNCI*, said Dr. Flockhart.

He also noted that the 80 women in the current study are part of a larger group of 300 expected to complete enrollment in the summer of 2005, and said that once the data are collected from the larger group, "we would be prepared to make clinical recommendations at that point." ◆

(Director's Update continued from page 1)
proposals, addressing trans-NCI policy issues affecting personnel and resources, and alerting the director and deputies to emerging issues that may affect NCI resources. The EC is the central body for formulating NCI's strategic initiatives and priorities. Two subcomponents of the EC are the extramural and intramural division directors, who are charged with addressing operational issues that predominantly or uniquely affect their respective communities.

A recent change related to NCI's management plan was the establishment of Implementation and Integration (I/I) teams. Membership of these new teams is drawn from across NCI, depending on the specific area. The group's specific charge is to complement our strategic priorities with the development of a resource management plan that takes into account current investments, future needs, scientific opportunity, and potential partnerships. As additional I/I teams form, more NCI staff will have the opportunity to participate in these cross-cutting, high-priority activities.

In the coming months, we will be realigning some of the activities within the Office of the Director (OD), requiring the deputy directors to assume more responsibility for expanding and enhancing the effectiveness of the OD. Two such realignments have occurred in the past several months: Dr. Anna Barker, deputy director for Advanced Technologies and Strategic Partnerships, assumed responsibility for activities carried out by the Office of Technology and Industrial Relations, the Technology Transfer Branch, the Office of Cancer Genomics, and the Center for Bioinformatics; and Dr. Mark Clanton, deputy director for Cancer Care Delivery Systems, now oversees the operations of the Office of Science Policy and Assessment.

The past few years have been a time of tremendous challenge and, on occasion, upheaval. But as I said at the recent meeting of the National Cancer Advisory Board, NCI has never had as many opportunities as we have today and, although limited, our financial resources are at the highest level ever attained and our intellectual capital is extraordinary. We have a talented and dedicated staff, and a cadre of extramural researchers, cancer centers, and advocates who are committed to seeing a day when cancer has been eliminated as a cause of suffering and death. Such a team can never be denied victory and so we move forward to our goal, confident in our success but cognizant of the challenges. ◆

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

Spotlight

Targeting Mesothelin Shows Promise for Mesothelioma, Pancreatic, and Ovarian Cancers

The development of molecular targeting approaches for the diagnosis and treatment of cancer relies upon the ability to distinguish between normal and cancerous cells. To accomplish this, researchers are in hot pursuit of proteins and receptors that are specifically displayed on the surface of cancer cells but are either not found or are expressed at much lower levels on normal cells. One such target that has shown some early promise for several hard-to-treat cancers is the protein mesothelin.

Researchers at NCI, other institutions, and biotechnology companies have been exploring various avenues to utilize mesothelin—a glycoprotein found on the surface of normal mesothelial cells that line the abdominal, lung, and heart cavities—as a target for antibody- and vaccine-based therapies.

"The limited distribution of mesothelin on normal tissues, combined with the fact that it is highly expressed on the surface of many human tumors, makes it an attractive target for tumor-specific therapy," explains Dr. Ira Pastan, chief of the Laboratory of Molecular Biology at the NCI Center for Cancer Research. Most notably, high levels of mesothelin are found in mesothelioma, pancreatic cancer, and ovarian cancer.

Mesothelin also appears to play a role in malignancy, adds Dr. Raffit Hassan, a principal investigator in Dr. Pastan's lab. "These characteristics make it a very important molecule for targeted therapies," he says.

The protein, thought to play a role in cellular adhesion, is also being studied as a cancer vaccine target to trigger a tumor-specific immune response, and as a diagnostic marker to indicate the presence and progression of certain malignancies. Mesothelin was discovered by Drs. Kai Chang, Mark Willingham, and Pastan at NCI; the team then cloned the gene encoding mesothelin, aided by a lab-generated monoclonal antibody, K1, that specifically recognizes mesothelin. Dr. Pastan, with Drs. David Fitzgerald and Partha Chowdhury, took the research a step further, combining the Fv portion of an antibody to mesothelin with a portion of a highly toxic protein, *Pseudomonas* exotoxin A, to create an immunotoxin called SS1P.

Preclinical studies of SS1P demonstrated antitumor activity against mesothelin-expressing tumors in animal models as well as tumor cells obtained directly from patients with mesothelioma and ovarian cancer. Drs. Robert Kreitman, Hassan, and Pastan are conducting two phase I studies to determine the safety and efficacy of SS1P in patients with advanced cancers whose tumors express mesothelin.

"Preliminary results indicate that SS1P is well tolerated, shows promising clinical activity, and may be useful in patients with small-volume disease who have failed standard chemotherapy," says Dr. Hassan. NCI has entered into a Collaborative Research and Development Agreement (CRADA) with Enzon Pharmaceuticals, Inc., to further develop SS1P for mesothelioma, ovarian, and pancreatic cancers as the immunotoxin moves into phase II trials.

Meanwhile, at the Johns Hopkins Kimmel Cancer Center, Dr. Elizabeth Jaffee and colleagues have had some success with an experimental vaccine that indicates mesothelin could be an important component of a therapeutic vaccine. During a clinical trial using tumor vaccinations for patients with pancreatic cancer, the Hopkins team discovered that three patients had a strong anti-mesothelin T-cell immune response. Six years after vaccination, all three patients are still alive and tumor free. Based on these findings, the researchers have initiated preclinical studies in collaboration with Cerus Corp. to develop a therapeutic listeria-based, mesothelin-targeted cancer vaccine for use against mesothelin-expressing cancers.

Mesothelin also may prove useful in the diagnostic arena. For example, a mesothelin variant has been detected in very small quantities in the blood of patients with malignant mesothelioma and ovarian cancer. A study led by Dr. Ingegerd Hellstrom of the Pacific Northwest Research Institute, showed that the level of these soluble mesothelin-related proteins (SMR) in the blood could potentially be useful to diagnose and measure progression of mesotheliomas. According to their study, 84 percent of patients with mesothelioma had elevated SMR, with increased levels of SMR noted in patients with increased stage and tumor burden. Their results also indicated that SMR could potentially be

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Cancer Research Highlights

International Mammography Performance Compared

A survey of international mammography practices shows that the percentage of screened women recalled for further testing does not correlate with the rates of cancer detection. The study, appearing in the current *Journal of Medical Screening*, found that countries with lower recall rates had fewer false-positive results and therefore increased the predictive value of further clinical visits. However, the rates of cancer detection by mammography were similar regardless of recall rates.

The International Breast Cancer Screening Network conducted the study to evaluate and compare recall rates across countries. Recall rates are the percentage of abnormal results that are recommended for further study. Low recall rates could reduce early detection, while high recall rates subject women to unnecessary follow-ups. The survey received results from 22 countries, each detailing how they read and interpreted mammograms. The countries varied widely in their methods of screening, data collection, and image interpretation. In fact, no single category was reported the same way by every country.

These differences translated into variances among recall rates, from 1.4 percent in the Netherlands to 15.1 percent in the United States. Some similarities between countries were found; recall rates generally were higher for initial screenings versus subsequent screenings, and also decreased with patient age. Cancer detection rates ranged from 3.7–10.6 per 1,000 mammograms, but did not follow the pattern of recall rates.

The authors concluded that a more standardized approach to mammography would allow for more valid international comparisons, which could potentially lead to finding optimal mammography recall rates.

Bcl-2 Expression Suppresses DNA Mismatch Repair

Researchers at Chosun University in South Korea have demonstrated that the Bcl-2 protein, which is known to prevent programmed cell death, can also inhibit cell growth. The study, appearing in the December 26 online issue of *Nature Cell Biology*, shows that a major consequence of Bcl-2-mediated cell growth arrest is suppression of the cell's DNA mismatch repair mechanism. This discovery illustrates another pathway for Bcl-2 carcinogenesis and also shows that senescent cells are at high risk for becoming cancerous.

As cells grow and divide, their DNA is constantly at risk for developing mutations. One type of mutation occurs when complementary DNA base pairs become mismatched, due either to replication errors or to external agents such as radiation. Normally, cells have a system in place to repair these errors, but Dr. Ho Jin You and colleagues showed that, in cell culture, Bcl-2 can suppress the expression of the MSH2 protein, a key component of mismatch repair. The loss of this repair protein is related to Bcl-2 inhibition of other proteins involved in cell growth. "This suggests that the Bcl-2-mediated cell cycle arrest might induce genetic instability," noted the authors.

These findings show that Bcl-2 expression might promote carcinogenesis by reducing a cell's ability to repair DNA damage and by preventing apoptosis once the cell starts to become cancerous. They also link the end of cell growth with the beginning of cancer, which may help explain the dramatic increase in cancer incidence with age.

Gefitinib Fails to Show Survival Benefit

The targeted agent gefitinib (Iressa) failed to improve survival compared with placebo in a clinical trial with nearly 1,700 patients with advanced non-small-cell lung cancer (NSCLC), the drug's manufacturer, AstraZeneca, reported on December 17. Although there was a statistically significant improvement in tumor shrinkage, there was no statistically significant improvement in survival compared with placebo (median 5.6 months vs. 5.1 months). All patients in the trial, called ISEL, had advanced NSCLC that had progressed after one or two lines of chemotherapy. "The trial was well designed, the data are robust, and there is no methodological explanation for these findings," said Dr. Nick Thatcher, the study's principal investigator.

The U.S. Food and Drug Administration (FDA) cleared gefitinib for marketing in May 2003 under an accelerated approval mechanism. The approval was based on trial results showing the drug could significantly shrink tumors in approximately 10 percent of patients. Under the accelerated approval,

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(Research Highlights continued from page 4)
AstraZeneca was required to conduct follow-up studies to determine whether gefitinib could extend survival. In a statement, FDA said it will determine whether gefitinib should be withdrawn from the market after the agency has fully evaluated the study results. Both the FDA and AstraZeneca recommended that patients currently taking gefitinib not change their therapies without consulting their physicians.

In the United States, the FDA has approved three drugs for second-line therapy in patients with NSCLC: erlotinib (Tarceva), docetaxel (Taxotere), and pemetrexed (Alimta). According to Dr. Scott Saxman, a senior investigator in the NCI Cancer Therapy Evaluation Program, NCI is thoroughly evaluating data from the ISEL trial as it becomes available and is working closely with trial investigators and the company to determine how the results should influence the current clinical trials involving gefitinib.

CEA-TRICOM Vaccine Proves Safe and Effective in Phase I Trial

Carcinoembryonic antigen (CEA), a protein linked to metastasis, is overexpressed in a variety of cancers, including most found in the colon, breast, lung, stomach, and pancreas. In previous trials testing CEA vaccines made with recombinant vaccinia or fowlpox viruses, patients with advanced cancers showed an immune response that eventually tapered off. Research has shown, however, that costimulation of the immune system with three molecules known collectively as TRICOM can enhance the efficiency of vaccines. In light of this, a team from Georgetown University Medical Center, Therion Biologics Corporation, and the Laboratory of Tumor Immunology and Biology at NCI's Center for Cancer Research tested the first-ever vaccine that combines CEA antigen with TRICOM. Their results were published ahead of print, Dec. 21, 2004, in the *Journal of Clinical Oncology*.

The researchers enrolled 58 patients who had advanced CEA-expressing cancers and administered a regimen that included CEA-TRICOM vaccine made with fowlpox, either alone or in combination with CEA-TRICOM vaccine made with vaccinia. After 4 months, 40 percent of patients had stable disease; more than half of these maintained stability beyond 6 months. Eleven patients showed decreased or stable serum CEA levels, and one patient had a pathologic complete response. While the phase I nature of the study prohibits claims about overall and progression-free survival, Dr. Jeffrey Schlom, an NCI author, noted, "Patients who received both the vaccinia CEA prime vaccination and the fowlpox-CEA booster vaccinations showed a better response than those who received the fowlpox-CEA vaccine. Prolonged survival also correlated with immune response to the vaccine." ◆

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helpful in screening asbestos-exposed individuals for early evidence of developing mesothelioma. Fujirebio Diagnostics, Inc., is currently trying to develop a commercial diagnostic based on this research.

"Pancreatic cancer and mesothelioma are both aggressive and deadly cancers with no effective treatments currently available," says Dr. Pastan. "The new interventions in development could change that scenario considerably." ◆

Funding Opportunities

For comprehensive information about NCI funding priorities and opportunities, go to http://www.cancer.gov/researchandfunding.

***The NIH Roadmap for Medical Research Funding** provides a framework of the priorities NIH must address to optimize its research portfolio. It identifies the most compelling opportunities in three main areas: new pathways to discovery, research teams of the future, and re-engineering the clinical research enterprise. For complete information on Roadmap funding opportunities, go to http://nihroadmap.nih.gov. Newly released Roadmap funding opportunities are listed below.*

Interdisciplinary Training: Behavior, Environment and Biology

RFA-RM-05-010

This postdoctoral, institutional National Research Service Award (NRSA) will support the establishment of innovative programs that provide formal coursework and research training in a new interdisciplinary field to individuals holding advanced degrees in a different discipline. This RFA will use the Ruth L. Kirschstein NRSA institutional research training grant (T32) mechanism. For the complete RFA, go to http://grants.nih.gov/grants/guide/rfa-files/RFA-RM-05-010.html. More information is available at http://nihroadmap.nih.gov/interdisciplinary/index.asp.

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Molecular Libraries Screening Instrumentation—SBIR/STTR

PA-05-014

This PA invites research applications to develop innovative instrumentation to maximize the efficiency and augment the capabilities of molecular library high-throughput screening systems. This PA will use the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) mechanisms, and accompanies a Request for Applications of similar scientific intent (RFA RM-04-020) that will use the traditional research project grant (R01) mechanism. For the complete PA, go to http://grants.nih.gov/grants/guide/pa-files/PA-05-014.html. More information is available at http://nihroadmap.nih.gov/molecularlibraries/index.asp.

Pilot-Scale Libraries for High-Throughput Screening

RFA-RM-05-014

This RFA invites applications for funding from the NIH Molecular Libraries Roadmap program for the generation of pilot-scale chemical diversity libraries. These libraries will be used for high-throughput biological screening by the Molecular Libraries Screening Center Network (MLSCN). The NIH Biotechnology Resource Grant (P41) award mechanism will be used. This is a one-time solicitation for 3-year grants. Letters of Intent are due January 14, 2005. For the complete RFA, go to http://grants1.nih.gov/grants/guide/rfa-files/RFA-RM-05-014.html. More information is available at http://nihroadmap.nih.gov/molecularlibraries/index.asp. ◆

Featured Clinical Trial

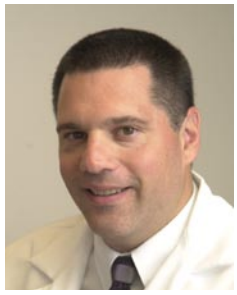
Hormone Therapy Plus Chemotherapy For Prostate Cancer

Name of the Trial

Phase III Randomized Study of Androgen Blockade with Concurrent Chemotherapy Versus Delayed Chemotherapy in Patients with High-Risk Hormone-Naive Prostate Cancer (RTOG-P-0014).
See the protocol summary at http://cancer.gov/clinicaltrials/RTOG-P-0014.

Principal Investigators

Dr. Kenneth Pienta, Radiation Therapy Oncology Group; Dr. Naomi Balzer-Haas, Eastern Cooperative Oncology Group; Dr. Arif Hussain, Cancer and Leukemia Group B; Dr. Gregory Swanson and Dr. Primo Lara, Southwest Oncology Group



Dr. Kenneth Pienta
Principal Investigator

Why Is This Trial Important?

Prostate cancer often needs male sex hormones (androgens) to grow. Doctors may treat hormone-sensitive (or hormone-naive) prostate cancer by blocking the body's ability to make and use androgens in a procedure called androgen blockade. Most prostate cancers, however, eventually become androgen independent, and androgen blockade stops working. Doctors may then turn to various chemotherapy drugs to prolong patients' lives.

In this trial, researchers are investigating whether prostate cancer patients who receive chemotherapy at the start of androgen blockade live longer than patients who receive chemotherapy only after androgen blockade has stopped working. All of the patients, who are deemed to be at high risk of death from their disease, will receive androgen blockade. Half of the patients will receive chemotherapy concurrently, while the other half will receive chemotherapy once androgen blockade has failed.

Who Can Join This Trial?

Researchers seek to enroll 1,050 men aged 18 and over, diagnosed with adenocarcinoma of the prostate, whose cancer has recurred following local treatment (surgery or radiation) and who are at high risk of death as determined by a doubling of prostate-specific antigen within a period of 8 months. See the full list of eligibility criteria for this trial at http://cancer.gov/clinicaltrials/RTOG-P-0014.

Where Is This Trial Taking Place?

Study sites in the United States and elsewhere are enrolling patients in this trial. See the list of study sites at http://cancer.gov/clinicaltrials/RTOG-P-0014.

Contact Information

See the list of study contacts at http://cancer.gov/clinicaltrials/RTOG-P-0014 or call NCI's Cancer Information Service at 1-800-4-CANCER (1-800-422-6237). The call is toll-free and completely confidential. ◆

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

Notes

Clinic Receives Media Award

The Cancer Preventorium, a Washington, D.C., clinic offering preventive cancer screenings for Latino immigrants, was 1 of 11 winners of the Innovation in Prevention Awards from the U.S. Department of Health and Human Services for its media program. The awards are presented to organizations for promoting healthy lifestyles. Dr. Elmer Huerta (at left),

who founded the clinic at the Washington Cancer Institute on the campus of the Washington Hospital Center in 1994, accepted the award on behalf of the Cancer Preventorium. The clinic uses radio and television to encourage Latinos in the area to visit a physician as a preventive measure, before they develop disease symptoms. Dr. Huerta is a former member of the National Cancer Advisory Board and maintains a close relationship with NCI. He also produces and hosts three health-related radio shows, one of which is nationally syndicated. He started a weekly TV program, *Hablemos de Salud* (*Let's Talk About Health*), in 1996 on MHz NETWORKS, a Washington-area station with multicultural programming.

Comments Invited on Future Biospecimen Needs

NCI's Cancer Diagnosis Program is requesting input and comments to help efforts to estimate future biospecimen resource needs. The program has developed a Web site—www.tissueissues.nci.nih.gov—to solicit input about human tissue requirements in cancer research. Users should log in by choosing the description that best identifies the research group they represent. All responses are confidential, but users are encouraged to include their primary areas of expertise. For additional information, contact Dr. Kishor Bhatia at bhatiak@mail.nih.gov.

Last Chance for Web Site Input on Future of Clinical Trials

The Clinical Trials Working Group (CTWG), via its Web site at http://ncicbforums.nci.nih.gov/ictQuestions/login_form, continues to seek feedback about revising the cancer clinical trials system. Users should log in by choosing from a menu the description that best identifies the group they represent and entering the password (CTWGstakeholder) before providing their input. The password is also given on the login page. All responses will be kept confidential. The Web site is open for feedback through January 15, 2005.

Imaging Informatics Resource Launched Through Public-Private Partnership

NCI's Cancer Imaging Program recently launched a Web-accessible imaging database resources initiative (IDRI) in conjunction with the Foundation for the National Institutes of Health (FNIH) and the National Electrical Manufacturers Association.

IDRI's goal is to rapidly create a Web-accessible and validated CT imaging database to support the development, optimization, and testing of application-specific software tools with a goal of improving the clinical management of lung cancer. The IDRI demonstration project is an expansion of NCI's Lung Imaging Database Consortium and the Lung Cancer Screening Trial. Imaging companies participating in the initiative include AGFA, Fujifilm, GE Healthcare, iCAD, Kodak Health Imaging, Siemens Medical Solutions, Philips Medical Systems, and R2 Technology.

IDRI is part of NCI's efforts to speed the development and dissemination of quantitative informatics tools for imaging and integration of other patient data for clinical decision making. This will help enable the use of molecular imaging and other molecular-based methods for patient-specific diagnosis and assessment of therapy response.

For additional information on this initiative, contact Dr. Larry Clarke at lclarke@mail.nih.gov. Corporations interested in joining this partnership should contact Julie Wolf-Rodda of FNIH at jwolf-rodda@fnih.org.

Coffey Discusses Common Denominators of Cancer

Dr. Donald Coffey, professor of urology, oncology, pathology, pharmacology and molecular sciences at Johns Hopkins School of Medicine, delivered the Center for Cancer Research Grand Rounds lecture on January 4. Dr. Coffey discussed the importance of looking at aspects common to all cancers, rather than just looking for markers present in a small percentage of tumors. He cited cell shape as one prime example of a common factor. "It doesn't matter what the origin of the cancer is," Dr. Coffey said. "One of the lowest common denominators of cancer progression is a physical change." Dr. Coffey then described changes in chromatin structure that predate changes in cell structure, noting that all of the prostate tumor samples he studied from autopsies had multiple, unbalanced chromosomal rearrangements. The proteins involved in mitosis are also critical, he noted, because chromosomal ploidy changes are also a hallmark of tumor growth. ◆

Community Update

For Cervical Cancer Screening Month, NCI "TEAMS UP" in a Unique Partnership

The National Cervical Cancer Education Campaign has proclaimed January as Cervical Cancer Screening Month. NCI is 1 of 31 Campaign partners seeking to give women and their physicians information about what causes cervical cancer and the best ways of preventing or detecting it. Screening to check for cervical changes before there are symptoms is important because it can help find abnormal cells before cancer develops. Finding and treating abnormal cells can prevent most cervical cancer. Screening can also help find cancer early, when treatment is more likely to be effective.

NCI's Cancer Information Service (CIS) partnership program recently launched a new initiative to help overcome cancer health disparities in this area. Many women in the United States do not get screened for early detection of cervical and breast cancer at recommended intervals, despite the proven effectiveness of screening in reducing risk for these diseases. This is particularly true for women who don't get needed services because of fear and mistrust, lack of knowledge or awareness of services offered, limited physical access to services, socioeconomic barriers, language or cultural orientation, or an inability to follow through with provider recommendations. There are many cancer control approaches that work, but very little is known about how best to disseminate these approaches to widely implement them at the community level.

CIS, the Division of Cancer Control and Population Sciences, the Office of Education and Special Initiatives, and the Office of Liaison Activities are partnering with the American Cancer Society (ACS), the Centers for Disease Control and Prevention's (CDC) National Breast and Cervical Cancer Early Detection Program, and the U.S. Department of Agriculture's (USDA) Cooperative State Research, Education and Extension Service Agents on a pilot project called "TEAM-UP: Cancer Screening Saves Lives." The pilot program's goal is to increase participation in cervical and breast cancer screening programs among never and/or rarely screened women in eight states—Alabama, Georgia, Illinois, Kentucky, Mississippi, Missouri, South Carolina, and Tennessee—with persistently high cervical and breast cancer incidence and mortality rates. NCI/CIS Partnership program staff are working with ACS regional planners and CDC and USDA staff to build and sustain partnerships that encourage the adoption and implementation of evidence-based screening programs to reach those populations of women at greatest risk for cervical and breast cancer.

The dissemination of evidence-based interventions that target these women is one mechanism to address the cancer health disparities among diverse populations. An ongoing evaluation of "TEAM-UP" will assess whether this type of partnership is able to train public health practitioners to adopt research-tested cancer control approaches in the field. ◆

For more information on the National Cervical Cancer Education Campaign, go to: http://www.cervicalcancercampaign.org/. ◆

Featured Meetings and Events

A comprehensive calendar of cancer-related scientific meetings and events sponsored by NCI and other scientific organizations is available at: http://calendar.cancer.gov/ ◆

The *NCI Cancer Bulletin* is produced by the National Cancer Institute (NCI). NCI, which was established in 1937, leads the national effort to eliminate the suffering and death due to cancer. Through basic, clinical, and population-based biomedical research and training, NCI conducts and supports research that will lead to a future in which we can identify the environmental and genetic causes of cancer, 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://www.cancer.gov.

NCI Cancer Bulletin staff can be reached at ncicancerbulletin@mail.nih.gov.