# PreventionPOST

*January 2002*
VOLUME 4/ISSUE 1

NEWSLETTER OF THE NCI DIVISION OF CANCER PREVENTION


NATIONAL CANCER INSTITUTE

## IN THIS ISSUE



## Early Detection Research


PETER GREENWALD
DIRECTOR, DIVISION OF CANCER PREVENTION


The ultimate aim of early detection is to decrease cancer mortality. In the Division of Cancer Prevention, our early detection goal is to develop and test early detection methods to achieve that aim. Further, we do so with controlled clinical trials that meet the most stringent criteria for quality of evidence as articulated by the U.S. Preventive Services Task Force (USPSTF). The USPSTF is an expert group that periodically reviews early detection research and provides clinical guidelines for the medical profession and the public. Their first and strongest level of evidence is "Evidence obtained from at least one properly randomized controlled trial."

In DCP, several research groups work on such trials. The design, management, and analysis of early detection clinical trials falls to the Early Detection and Biometry Research Groups. The Organ Systems Research Groups add medical expertise to research teams focused on early detection, and the Cancer Biomarkers Research Group utilizes new technologies for biomarker development and validation that may provide better means in the future for risk prediction and detection of early neoplasia. Biorepository maintenance and research is done in collaboration with NCI's. Division of Cancer Epidemiology and Genetics.

Prostate, lung, colorectal, and ovarian cancers together account for about half of all cancers diagnosed and half of all cancer deaths in the United States each year. DCP's Early Detection Research Group is managing a large-scale randomized trial evaluating prostate-specific antigen, digital rectal exam, chest x-ray, sigmoidoscopy, CA125 tumor

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## Molecular Diagnosis and the Early Detection Research Network (EDRN)


RON LUBET AND LORA KUTKAT


One objective of cancer prevention is to decrease the incidence of invasive cancers by identifying people at high risk and then intervening with preventive strategies in such individuals. High risk may be due to a prior cancer, hereditary mutations (e.g., BRCA1 in breast, APC in colon), other factors (e.g., smoking), or hormonal stimulation. Persons in these population-based groups are at higher risk than average but (except for high penetrance germ-line mutations) have a lifetime risk of less than one in four for any specific cancer. One approach to assessing individualized risk is to examine people for the changes associated with the carcinogenic process or perhaps even the earliest stages of invasive cancer. Early attempts at determining personal risk have often involved the use of imaging techniques; such as chest x-rays which is one of the techniques used in the Prostate, Lung, Colorectal and Ovarian Cancer Screening Trial (PLCO).

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**Early Detection Research** continued from page 1

markers, and transvaginal ultrasound to see if these screening tests will reduce mortality from these four cancers. Known as the PLCO Cancer Screening Trial, this landmark study includes about 155,000 screened participants and usual care controls at ten centers. The trial will go through 2012.

Newer, promising early detection methods are also being studied:

- Low-dose spiral (or helical) computed tomography (CT) has been shown to be more sensitive than chest x-ray in detection of small lung lesions. However, the relative benefits and harms of spiral CT screening for lung cancer have not been determined. Randomized clinical trials in the 1970s showed that chest x-ray and sputum cytology could improve detection of resectable lung cancers, but did not show a decrease in mortality. PLCO investigators showed the feasibility of a randomized, spiral CT lung screening trial by screening 3373 high risk people. A definitive trial, the National Cancer Screening Trial, will be conducted jointly by PLCO investigators and the American College of Radiology Imaging Network.
- Dr. David Ahlquist and his colleagues at the Mayo Clinic have explored the feasibility of a stool assay panel of selected DNA alterations in distinguishing persons with colorectal cancer from people with polyps or without lesions. Analyzable human DNA was recovered form the stools of all 61 persons tested and the method was shown to hold promise as a stool screening approach for colorectal neoplasia. A larger study is proposed.
- Drs. Lance Liotta, chief of NCI's Laboratory of Pathology, and Emanuel Petricoin of the Food and Drug Administration are studying proteomic patterns of serum from patients with ovarian or prostate cancer, benign conditions, or no prostatic or ovarian disease to see if low-molecular-weight serum proteins, analyzed by an artificial intelligence recognition algorithm, can be used to distinguish these three groups. Initial studies show promise of this technique.

Randomized clinical trials are an essential step in determining the effectiveness of new technologies for reducing cancer mortality. DCP puts a high priority on this type of research. ■

## Screening for Cancer

DONALD E HENSON

The diagnosis of the cancer is being pushed back in time. Smaller and smaller cancers are being found through screening and early detection. This backward push is reflected in national survival and mortality statistics and types of specimens submitted by surgeons.

Carcinoma in situ of the uterine cervix is now three times more common than its invasive counterpart. As a result, mortality for this disease in the US has decreased significantly. In the early 1970s, most reported series of breast cancers included only a small proportion of in-situ ductal carcinomas, usually less than 5%. Currently, in some publications the frequency of ductal carcinoma in situ approaches 30%. Screening has literally revealed a new disease of the breast. The mortality for breast cancer has consistently decreased for the last 10 years and most likely will continue to decrease. For prostate, the systematic use of PSA (prostate specific antigen) testing in men over 50 has resulted in the increased detection of prostate intraepithelial neoplasia and early prostatic cancer. For colon, the systematic excision of adenomas found through endoscopy has contributed to a reduction in the incidence of invasive carcinomas. If we could routinely detect and treat these small tumors, we would for practical purposes be able to eliminate the mortality from the vast majority of invasive cancers without even knowing their cause.

There is reasonable expectation that molecular biology will eventually provide new tools for screening and early detection. These tools should have the ability to detect very small cancers including those present in poorly accessible anatomic sites, such as prostate and ovary. This expectation frames the work of the Early Detection Research Network whose mission is to discover and validate biomarkers for early detection.

At the present time, more traditional forms of screening continue to contribute to success in our fight against cancer. This has been recognized by DCP in its long range planning and program development. The Division recognized that previous successes, for instance the HIP trial for mammogra-

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## The ALTS Trial

KATHLEEN FOSTER

The ASCUS/LSIL Triage Study (ALTS) was designed to resolve questions regarding the best possible management of low-grade and equivocal cytologic abnormalities of the cervix found on Pap tests. These Pap test results, referred to as ASCUS (Atypical Squamous Cells of Undetermined Significance) and LSIL (Low-Grade Squamous Intraepithelial Lesions), though considered mildly abnormal or ambiguous, account for millions of cases of abnormal Pap smears in the United States each year. In the majority of cases, finds of ASCUS and LSIL will resolve without treatment. However, occasionally they indicate a pre-cancerous condition, or rarely, cancer. This medical management dilemma indicated a need to develop effective colposcopy triage strategies that would identify patients with clinically significant disease while avoiding excessive follow-up evaluation for those determined to be low risk.

ALTS originally evolved from a joint workshop held in 1993 by ACOG (American College of Obstetricians and Gynecologists) and NCI, which mandated a trial to shed light on this clinical problem. Organized and funded by the NCI and administered by the Division of Cancer Prevention in collaboration with the Division of Cancer Epidemiology and Genetics, this randomized trial enrolled 5,000 women with a recent diagnosis of ASCUS or LSIL. Dr. Diane Solomon (DCP) and Dr. Mark Schiffman served as Co-Project Officers for the study. Four clinical centers in geographically diverse regions around the country followed the cohort for a total of two years. The trial consisted of three management arms. The first arm utilized immediate colposcopy (magnification of the cervix and biopsy of any clinical relevant lesions). The second arm involved HPV (Human Papillomavirus) triage, using colposcopy only if there is a positive HPV result. The third arm was a conservative management arm, with routine follow up cytology. If HSIL (High-Grade Squamous Intraepithelial Lesion) or worse was seen, triage to colposcopy was indicated. ALTS has also compared the efficacy of different strategies in the early detection of high-grade lesions.

Conclusions reached are threefold. For women with ASCUS testing for HPV is a highly sensitive way of detecting the underlying abnormalities that are at risk of progressing to

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## PreventionPOST

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### IN MEMORIUM

DCP suffered a great loss when Carolyn Clifford, Ph.D., passed away on May 31, 2001. Carolyn worked at NCI for the past 17 years and her research focused on the importance of diet in cancer prevention. At the time of her death she was co-acting Deputy Director of the Division of Cancer Prevention. In the past few years, she served as acting Chief of the Nutrition Research Group and acting Chief of the Prostate and Urologic Cancers Research Group. She was active in nutrition research across the NIH community and was a member of the NIH Nutrition Coordinating Committee and of the Women's Health Initiative. Her milestone contributions to the field of cancer prevention and dedication to DCP will not be forgotten.

**Carolyn Clifford, Ph.D.**

## AWARDS

In July the Cancer Prevention Research Training Merit Awards were presented to Lisa Colbert, Lori Beth Dixon, Ann O'Mara and Rachael Stolzenberg-Solomon. This is the second year that the Cancer Prevention Fellowship Program has awarded these certificates for outstanding performance.

**Cancer Prevention Research Training Merit Awardees with Steve Husting and Doug Weed.**

David Berrigan, a third year fellow, won the Cooper Institute 2001 Research Conference Paper Competition.

Qing Lan, a first year fellow, was awarded the Scholar-in-Training Award at the American Association for Cancer Research at the March meeting in New Orleans, LA. In addition, she was awarded the Outstanding Research Paper by a Fellow in the Division of Cancer Epidemiology and Genetics for the year 2001. ■

## ON THE PERSONAL SIDE

Best wishes go to Kerri McGowan-Lowery and her husband, Doug, on the birth of their daughter, Morgan Grace. ■

## RECRUITMENT FOR 2003

As the new fiscal year has begun, the recruitment effort is in full swing for the Cancer Prevention Fellowship Program. In conjunction with the Office of Communications, NCI, the fellowship program will be represented at more than 10 scientific meetings. In Spring of 2002, the office will travel to the Johns Hopkins University's Bloomberg School of Public Health's career fair and a career fair at Harvard University. ■

## CAREER MOVES

Lisa H. Colbert, PhD, MPH has joined the National Institute on Aging as a Senior Research Fellow; Rita Misra, PhD, MPH joined the Division of Cancer Treatment and Diagnosis, NCI, as a Biologist; Ann O'Mara, PhD, MPH joined the Division of Cancer Prevention, NCI as a Program Director; and Heng Xie, MD, MPH joined the Division of Cancer Treatment and Diagnosis as a Program Director. Congratulations and best wishes on their continued success. ■

## At the Forefront of Training

SUSAN WINER

The Cancer Prevention Fellowship Program had a great number of applicants to the program – 88 applications for the 2002 entry into the fellowship program. This is an increase of 37% over last year. The newest feature of the program is a career track in the Ethics of Public Health and Prevention. 20 applicants applied in response to this new career track.

Interviews for the Cancer Prevention Fellowship Program Class of 2002 were held on October 31, November 1 and 2. 30 applicants were interviewed and selected for the program to begin in July 2002. As a special feature former fellows give lectures on their career and research and how the fellowship program helped them attain their goals. This year the lecturers were: Corinne G. Husten,, MD, MPH, Branch Chief, Epidemiology Branch, Office of Smoking and Health, Centers for Disease Control and Prevention in Atlanta GA; Ellen Velie, PhD, MPH, Assistant Professor, Department of Epidemiology, Michigan State University, East Lansing, MI; and Sheila Prindiville, MD, MPH, former Assistant Professor of Medicine, University of Colorado Health Sciences Center, Denver, CO.

Second year fellows are currently working with preceptors in the following divisions: Division of Cancer Prevention ; Division of Cancer Control and Population Sciences; Division of Clinical Sciences; and the Center for Cancer Research.

First year fellows are getting their MPH at the following schools: Johns Hopkins University's Bloomberg School of Public Health, Harvard University, New York Medical College and the University of North Carolina at Chapel Hill.

The Cancer Prevention Fellowship Program suite in EPS, T41 is undergoing major renovations. Several staff members have relocated to the adjoining building in EPN Suite 3109. Dr. Shine Chang, an Epidemiologist, joined the program to spearhead program evaluation efforts. She came from the M. D. Anderson Cancer Center in Houston, Texas. ■

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Alternatively, one can identify molecular changes associated with cancer or the carcinogenic process. This is the primary focus of the EDRN. The explosion in the field of molecular biology in the past 20 years has helped to define many of the changes in cells that contribute to the carcinogenic process. These include 1) changes in DNA, e.g., mutations, recombination, and amplification or deletion of genes; 2) altered expression of specific genes resulting in altered expression of the proteins they encode; and 3) post-translational modifications, including phosphorylation and prenylation, which can alter the activity of proteins. Changes in these classes are seen in all cancers. Prostate specific antigen (PSA), for instance, is a protein that is expressed at higher levels in tumors than normal epithelium. We will briefly discuss two, of many, molecular biology approaches.

**Determination of DNA methylation patterns in lesions and serum**

Most cancers have various genes with altered expression when compared with control tissues. One way of decreasing gene expression is through decreasing the rate at which the gene is transcribed (made into RNA). Perhaps the most common manner of achieving decreased transcription is by methylation of the DNA of the gene. In fact, altered methylation patterns are common and early events in most cancers. The tools of molecular biology, like methylation-specific endonucleases and methylation-specific PCR primers, allow detection within a mixture of cells of some cells with methylation at specific sites. If methylation of specific genes is associated with cancer, scientists can examine a mixture of cells from the individual and determine whether neoplastic cells are present in the mixture. In a study looking for methylation of the APC gene (K. Kawakami, *et al.*, JNCI 92, 1805-1811, 2000) in patients with esophageal adenocarcinoma (EGA), methylation was observed in 92% of samples with EGA, in 40% of samples from patients with Barrett esophagus (a preinvasive lesion which may be a precursor to EGA), but in 0% of normal control tissues. This methylation pattern could be used to support a diagnosis of EGA but might also help identify the individuals with Barrett esophagus at highest risk for progression to EGA. These persons would be particularly appropriate for chemopreventive intervention. This approach appears applicable to many of the major epithelial cancers, including lung cancer.

**Proteomics: Altered protein expression in tumors and body fluids**

Differences in expression of proteins are associated with all tumors. Some may be directly associated with the carcinogenic process, whereas others may be secondary bystander effects. Regardless, these altered protein levels may be diagnostic, prognostic or risk markers. Recent improvements in 2-dimensional gel electrophoresis and SELDI (Surface Enhanced Laser Desorption/Ionization) and MALDI (Matrix Assisted Laser Desorption/Ionization) technologies, which allow the separation of proteins based on their ability to bind to surfaces with specific chemical characteristics, have made possible the simultaneous examination of scores or even hundreds of proteins. These methods raise the possibility that some combination of changes will achieve far greater accuracy than any single marker. Assessment of certain serum proteins (prostatin and carcinoembryonic antigen) appears to allow detection of early ovarian cancer with both moderate sensitivity and specificity (S.C. Mok, *et al.*, JNCI 83, 1458-1464, 2001). However, even this degree of accuracy is probably not sufficient to warrant random screening of the female population (G.B. Mills, *et al.*, JNCI 93, 1437-1439, 2001). Similarly, a study employing workers exposed to benzidine showed that measurement of two markers, a specific protein (P-300) and DNA copy number, in cells found in the urine could identify most individuals with cancer (G.P. Hemstreet, *et al.*, JNCI 93,427-436, 2001). These markers could also predict individuals at high risk of cancer 6 to 12 months prior to clinical diagnosis, thereby making this group amenable to prevention strategies. Thus, some of these proteomic approaches may prove to be particularly useful for non-invasive determination of lesions or risk.

Cancer detection and risk evaluation through molecular-based means, coupled with preventive interventions, are key components in DCP quest to reduce cancer incidence.

**For more information: http://edrn.nci.nih.gov** ■

## DCP Trials Reach Major Milestones

KARA SMIGEL CROKER

The Division of Cancer Prevention sponsors only a few large-scale screening and prevention trials, but each of these major studies will answer crucial medical questions. Three of these large studies have reached major milestones since the last issue of the *Prevention Post*.

The Selenium and Vitamin E Cancer Prevention Trial (SELECT), a study for the prevention of prostate cancer, opened its doors with a media blitz on July 24 and has begun randomizing participants. The Prostate, Lung, Colorectal, and Ovarian Cancer Screening Trial (PLCO) and the Study of Tamoxifen and Raloxifene, major DCP clinical trials aimed at cancer screening and breast cancer prevention respectively, have reached major milestones in recruitment.

### SELECT

On July 24, a call went out for healthy men age 55 and older to join the largest-ever prostate cancer prevention study, launched by NCI and a network of researchers known as the Southwest Oncology Group (SWOG). The Selenium and Vitamin E Cancer Prevention Trial, or SELECT, will determine if these two dietary supplements can protect against prostate cancer, the most common form of cancer, after skin cancer, in men. Out of a total of 32,400 men needed for the study 7,348 had joined SELECT as of January 28, 2002.

More than 400 sites in the United States, Puerto Rico, and Canada are recruiting participants for SELECT, which will take up to 12 years to complete. SELECT is the first study designed to look specifically at the effects of vitamin E and selenium, both separately and together, in preventing prostate cancer.

"We are looking for quite a few good men to join SELECT because it is an incredibly important prostate cancer prevention study," said Lori Minasian, MD, chief of the Community Oncology and Prevention Trials Research Group in DCP. "Previous research with vitamin E and selenium—in studies focused on other kinds of cancer—suggested that these nutrients might prevent prostate cancer. SELECT is focused on prostate cancer and, when the study is finished, we will know for sure whether these supplements can prevent the disease."

Nearly 76 million people saw television news stories about SELECT and the trial was featured in 49 of 50 major media markets in the United States in either radio, print, or TV coverage. NCI is following up on how this unprecedented news interest in a prevention trial will affect randomization and recruitment to see if any methods can be borrowed to assist recruitment for other important prevention trials.

**For more information: http://cancer.gov/select**

### PLCO

In late July, the last of nearly 155,000 men and women joined the PLCO, marking the end of the recruitment phase of the trial. The 10 PLCO centers in the trial began randomizing participants in 1995 to determine if certain cancer screening practices reduce the number of deaths from these cancers. Tests include digital rectal exam and a blood test for prostate specific antigen to test for prostate cancer, chest X ray for lung cancer, flexible sigmoidoscopy for colorectal cancer, and transvaginal ultrasound and a blood test for the tumor marker known as CA-125 to detect ovarian cancer.

PLCO will continue to collect and analyze essential health data from participants, who are randomized to usual care or to a screening group that receives screening tests for five years and then are followed for up to 10 more years.

"A fundamental mission of the NCI is to reduce cancer death rates," said John Gohagan, PhD., chief of DCP's Early Detection Research Group and head of the PLCO. The four cancers targeted in the PLCO together account for 48 percent of all cancers diagnosed and 49 percent of all cancer deaths in the United States. A success for any of the tests could make a significant difference in cancer mortality.

**For more information: http://cancer.gov/plco**

### STAR

In late summer, STAR reached the halfway point of recruiting 22,000 postmenopausal women at increased risk for developing breast cancer to this crucial prevention study. STAR is designed to determine whether the osteoporosis prevention and treatment drug raloxifene (Evista) is as effective as tamoxifen (Nolvadex) in reducing breast cancer risk. STAR is carried out by the National Surgical Adjuvant Breast and Bowel Project (NSABP).

As of December 31, 2001, 12,117 women had joined the trial out of more than 58,000 women who were eligible for the trial based on increased risk of breast cancer. More than 103,000 women have gone through the breast cancer risk assessment process offered by STAR investigators to deter-

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mine their eligibility for the study. "All women are at risk for breast cancer, whether they are eligible for STAR or not," noted Leslie Ford, M.D., associate director for clinical research at DCP. "STAR is designed for a particularly high-risk group."

To join the trial, women must have a risk of breast cancer that is equivalent to a 60-year old woman: 17 of every 1,000 would develop breast cancer within five years. More than half the women who have joined STAR have a risk for breast cancer that is higher than 32 per 1,000, nearly double the minimum risk.

Additionally, STAR is doing a better job of attracting minority women than previous breast cancer prevention studies: In only the first two years of STAR, 30% more minority women have joined STAR as had joined the Breast Cancer Prevention Trial (BCPT), the predecessor study to STAR, over the life of that trial. The BCPT had a total of 486 minority women on the 13,000-woman trial, compared with 692 minority women on STAR so far.

**For more information: http://cancer.gov/star** ■

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cervical cancer, and need an immediate intervention. Thus HPV testing is a viable option for the management of this abnormality. Secondly HPV testing is not useful for women with a Pap test diagnosis of LSIL. Over 80% of the women with LSIL tested positive for HPV. This high prevalence limits the usefulness of HPV testing in the management of LSIL. Finally it was noted that expert interpretations of Pap tests vary substantially in interpreting both thin-layer Pap test and histologic biopsies; agreement/ reproducibility was only moderate. Therefore this variability should be taken into account when using these interpretations, and in developing standards of practice.

Many more analyses of the ALTS data are in process and targeted for release over the next three years. Plans are underway for more than 30 subsequent publications analyzing longitudinal follow-up of the study cohort. These publications will examine topics such as sensitivity of the management arms for ASCUS and LSIL, cost utility, different perspectives on the risk of CIN 3, and issues related to HPV follow-up and treatment. Most importantly study data is being actively considered in the development of new consensus guidelines for the management of women with an abnormal Pap test. Further information on this study can be found at the ALTS web site, http://cancer.gov/prevention/alts.html

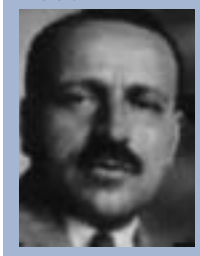
An additional outcome was the contribution that the ALTS trial has made by informing the discussion that took place at the Bethesda 2001 Conference. This NCI workshop held in May 2001 reviewed issues regarding the terminology and reporting of cervical cytology. As a result of discussions held between cytopathologists, cytotechnologists, clinicians and patient advocates, revisions were made to the Bethesda reporting system. The final 2001 Bethesda terminology can be found on their web site, http://bethesda2001.cancer.gov. ■

HISTORY OF CANCER PREVENTION

## George Papanicolaou, M.D., Ph.D.

1883 - 1962

DOUG WEED



The "Pap" smear, named for Dr. George Papanicolaou, emerged from the work of two Cornell University researchers, Dr. "Pap" and his colleague, Dr. Herbert Traut, a gynecologic pathologist. In 1943, they jointly published "Diagnosis of Uterine Cancer by Vaginal Smear" showing that women with cancer exhibited abnormal cells. Papanicolaou had first observed the phenomenon twenty years earlier, although he had originally set out to use cytological changes in vaginal discharges to measure normal cyclical changes in the ovulatory cycles of guinea pigs and other mammals. The "Pap" smear is now an integral part of early detection efforts worldwide.

Papanicolaou was born in Greece in 1883 and attended medical school at the University of Athens, graduating in 1904. He served in the Greek army medical corps and spent a year caring for lepers in a colony near his hometown. He left Greece to pursue more education in Munich, Germany where he received a Ph.D. in 1910 at the Zoological Institute in Munich. In 1913, Papanicolaou and his wife, Mary, arrived in the United States; both found jobs at Cornell Medical School in New York.

Papanicolaou's work in exfoliative cytology was not limited to the detection of cervical cancer. In 1954, he published a definitive text, "Atlas of Exfoliative Cytology" in which he extended his techniques to the respiratory, urinary, and upper gastrointestinal tracts as well as the breast.

He died in 1962, a few months after becoming director of the Papanicolaou Cancer Research Institute in Miami.

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phy and the fecal occult blood test for colon cancer, justified further screening trials. Thus, it laid plans for randomized trials designed to provide unequivocal evidence of mortality reduction using different modalities of screening for a variety of major cancers. As a result, the PLCO, a major national initiative, was created to evaluate screening tests for prostate, lung, colorectum, and ovarian cancer. Started in 1993, the trial surpassed initial goals by recruiting 155,000 participants in seven years. Because of its size and complexity, this trial has been carefully monitored by a Data Safety and Monitoring Board that meets periodically. Already, potential new trials have been inspired within the PLCO. They include a study of low dose spiral computed tomography for the detection of lung cancer, evaluating the role of aberrant crypt foci in the pathogenesis of colon cancer, and a special project on virtual colonoscopy will soon be published.

The Division has not neglected the pediatric population. Recently completed was a screening study in Canada for neuroblastoma the most common solid malignant tumor occurring in children under 5 year of age. All 476,603 children born in the province of Quebec during the 5-year period from May 1989 to April 1994 were eligible for screening at 3 weeks and 6 months of age. At three weeks, 425,816 children were screened and at 6 months 349,706 were screened. Supported by DCP and conducted by investigators from the University of Minnesota and Canada, this study was possible because Quebec maintains a province wide follow-up on all children. Control populations used during the study included the state of Minnesota and the province of Ontario. Neuroblastoma occurs in two forms, a benign non-fatal form found early in life and a virulent form that usually appears a little later. Both forms are thought to arise in utero. Screening increased the incidence of the benign form without decreasing the incidence of the more virulent form. Results from this trial will undoubtedly influence other countries contemplating screening programs for neuroblastoma.

DCP's leadership was again evident in the ALTS trial, one of the most significant clinical studies of cervical cancer ever undertaken. This randomized trial was designed to deal with the issues of patient management following an equivocal screening result. Women entering the trial already had an abnormal pap test. In this randomized triage trial, molecular testing was done for the different types of human papilloma virus, the alleged cause of cervical cancer. It was also the first trial designed to reveal the natural history of abnormal lesions of the uterine cervix. The outcome of this trial will influence our interpretation of cervical cancer screening and guide patient management for many years. Further, the design of this trial can serve as a model for all future clinical trials that triage the management of preinvasive lesions.

Sloan Kettering is conducting a study on the feasibility of a randomized trial on colonoscopy screening. The trial is based on the novel concept, based on previous studies, that a single screen around age 60 would reduce the incidence of colon cancer by 60%-75%. In the study, subjects receive an initial colonoscopy and after 5 to10 years a second colonoscopy to test the hypothesis. Control subjects receive usual care. The purpose of the study is to determine whether subjects can be recruited into such a trial and remain compliant during follow-up as well as to determine the psychosocial factors that influence compliance. This study represents a novel approach to the early detection of colon cancer and the results may lead to a change in screening recommendations.

As the Division continues to launch innovative randomized trials designed to test new technology, more effective and proven screening programs will find their way into medical practice. ■

**DCP home base: Executive Plaza**


Diane Solomon

The Division of Cancer Prevention would like to congratulate Dr. **Diane Solomon** (BGCRG) who was recognized with the Maurice Goldblatt Award in May 2001, the highest award given by the International Academy of Cytology, for her outstanding work in cervical cancer screening. She also received an NCI Merit Award in September 2001 for exemplary scientific leadership and technical management of the ASCUS/LSIL Triage Study.


Sudhir Srivastava

Dr. **Sudhir Srivastava** (CBRG) was selected to receive the Department of Health and Human Services (DHHS) Asian Pacific Network Special Award in May 2001, for advancing the interests and addressing issues of Asian Pacific Americans within the U.S. DHHS and of the general Asian Pacific Islander community.

In September 2001 the Nutritional Sciences Program at the University of Missouri-Columbia awarded Dr. **John Milner** (NSRG) The Boyd O'Dell Lecturer Award for excellence in nutrition.


Jaye Viner and Richard Klausner

Dr. **Jaye Viner** (GOCRG) received an NCI Commendation Medal in September 2001 for exceptional and sustained commitment to persons at risk for cancer and to the mission of the National Cancer Institute.


Harold Seifried

Drs. **Donald Henson** (CBRG), **Harold Seifried** (NSRG), **Sudhir Srivastava** (CBRG), **Claudette Varricchio** (COPTRG), and **Carolyn Clifford** were honored with a Special NCI Trans-Divisional Award in September 2001 for completion of the Best Practices Document-an online manual for NCI staff on grant review, funding and administration. Kudos to all!

## Annual Lecture on Cancer Prevention

SUSAN WINER

On August 2nd , the Annual Lecture on Cancer Prevention was held in Lister Hill auditorium on the NIH main campus. After opening remarks, Doug Weed, Director of the Cancer Prevention Fellowship Program, introduced the speaker, Frederick P. Li, MD. Dr. Li is Vice Chair for Population Sciences, Department of Adult Oncology, Dana Farber/Harvard Cancer Center in Boston, Massachusetts. In addition, he is Professor of Clinical Cancer Epidemiology at the Harvard School of Public Health and Professor of Medicine at the Harvard Medical School.

The title of Dr. Li's lecture was *Identification and Care of Those at Highest Risk of Cancer.*

As part of the introduction, Dr. Li was presented with a special hand calligraphy certificate in appreciation of his participation in the lecture series.

After the lecture, Dr. Li answered questions from the assembled large audience that included Cancer Prevention Fellows, NCI/Irish Consortium researchers and interested researchers at the NIH. A reception was held in the lobby of Lister Hill. ■

## Highlight on Conferences, Workshops, Retreats

JUDITH J. SMITH

DCP maintains a primary commitment to improving public health by advancing biomedical science and strengthening preventive medicine. One approach used to accomplish this goal includes sponsoring and coordinating scientific and administrative workshops and seminars. Such meetings provide a forum for galvanizing scientific ideas and enhancing collaborations among government, academia, and industry. Several activities of this nature were presented recently.

Young Kim, Nutritional Sciences Research Group (NSRG), coordinated a workshop titled "Nutrition and Genomics" on June 18, 2001. The workshop was a joint NCI, USDA, and American Society for Nutritional Sciences effort to raise awareness of the linkages between nutrients and genes as determinants of growth, development, and disease risk. The workshop produced a number of substantive recommendations to promote the use of new and innovative gene technologies in nutritional science.

Sharon Ross, also from NSRG, coordinated a three-day workshop in August, "Diet, DNA Methylation Processes and Health" to enhance knowledge and understanding of the role of dietary factors in DNA methylation processes. Attendees included basic scientists, clinicians, epidemiologists, and nutritional scientists from the nutrition community. The workshop was a collaborative effort between federal sponsors, American Society for Nutritional Sciences, and the International Life Sciences Institute.

In August, the Cancer Biomarkers Research Group (CBRG) presented "Nanotechnology in Early Detection of Cancer" in collaboration with the National Institute of Standards and Technology. The goal of this workshop was to assemble experts in the field to discuss and explore potential utility of nanotechnology in early detection and prevention programs. CBRG also convened the "Second Annual Early Detection Research Network Scientific Workshop" in Seattle in mid-October.

**Program operation staff gather in Annapolis, Maryland**

The Second Annual Program Operations Staff (POS) Retreat was held on September 24-25 at the Governor Calvert House in Annapolis, MD. Dr. Rhey Palmer, facilitator, guided the staff through Conflict Mediation-Self Assessment to enhance understanding of the nature of conflict and conflict resolution. Linda Wong was re-elected project team leader for the upcoming year; Linda Grey will serve as alternate.

Upcoming workshops include the second annual Site Coordinator's Opportunity for Research Excellence (SCORE) scheduled for March 2002. The purpose of this meeting is to convene clinical trials coordinators of DCP contract studies and DCP program staff to discuss issues related to the conduct of the trials. Ellen Richmond (Gastrointestinal and Other Cancers Research Group) is coordinating this effort. ■

JENNIFER FLACH

We would like you to join us in welcoming new staff to DCP:

**Doris Browne, M.D., M.P.H.**
Program Director, Breast and Gynecologic Cancers Research Group from Medical Research and Development Headquarters, U.S. Army Medical Research Command

**Emilia Richichi, Ph.D.**
Program Specialist, Chemopreventive Agent Development Research Group from the World Bank Group

**Darnell Proffitt**
Program Operations Staff, Office of the Associate Director from Office of Space and Facilities Management, NCI

**Shine Chang, Ph.D., M.P.H.**
Expert Epidemiologist, Office of Preventive Oncology from M.D. Anderson Cancer Center.

**Lanette West-Johnson**
Administrative and Personnel Technician, DCP ARC from Advanced Technology Center, NCI

## Good Luck!

Yvonne Grant, Nutrition Research Group, in her new position at DCCPS.

Barry Portnoy, Office of the Deputy Director, in his new position at the NIH Office of Disease Prevention.

Shelia Stempler, Office of the Director, in her retirement in Boynton Beach, Florida.

D'Annie Gunter, Protocol Information Office, in her new position in the Public Health Service.

Andrew Hruszkewycz, Prostate and Urologic Cancers Research Group, in his new endeavor.

Twanda Adams, Cancer Biomarkers Research Group, in her new position in the Cancer Information Service.

Nikki Herman, DCP ARC, in her new position at the National Oceanographic & Atmospheric Administration, Department of Commerce.

Barry Portnoy and Peter Greenwald

Shelia Stempler and Peter Greenwald

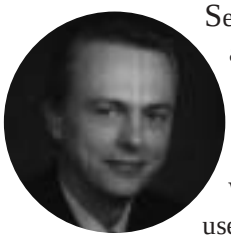
## CONGRATULATIONS!

Congratulations to Howard Parnes, M.D., named Chief of the Prostate and Urologic Cancers Research Group.

DCP says farewell to Shelia Stempler

## Survey Says...

DOUGLAS L. WEED
Editor-in-Chief



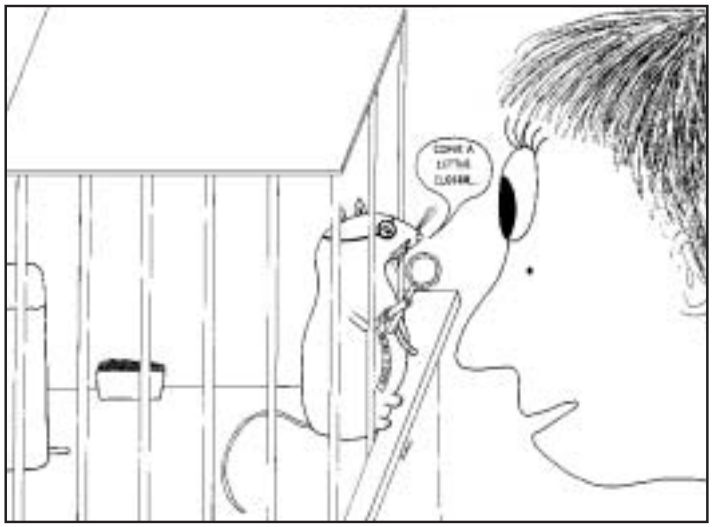
Several months ago, we sent a survey to all DCP staff and Prevention Fellows with several open-ended questions about the PreventionPost. Simple questions like: "What do you like about it? What do you not like about it? Is it useful? What would you add to it? Are there some themes you might recommend to us?

We hope that the person who responded is happy with the changes we made. Just kidding. Overall, we had a not-so-impressive 25% response rate, but the comments and suggestions we received were helpful and largely constructive. We were pleased with the positive responses and we pored over the more critical comments to find ways to improve. Here are some of the changes that we have made to date: significant decrease in the number of personal questions in the spotlight piece; more focus on DCP-sponsored workshops and on the DCP retreats (e.g. the Program Operations Staff). In addition, we're moving towards increasing the scientific content of articles so that the newsletter will be relevant to a broader readership.

To those who asked for a more frequent publishing schedule, we are sorry. Our all-volunteer team is doing the best it can. To those who reminded us about the importance of web-based and electronic versions, we have established a new web-site subgroup within the team with that responsibility. I am not sure what to say to the individual who wondered why anyone outside the Division would care about what's going on inside the Division. Thanks again for your interest in the newsletter. ■

CARTOON

GRAÇA DORES



EARLY DETECTION

**PreventionPOST**
Newsletter of the Division of Cancer Prevention
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