NATIONAL CANCER INSTITUTE

NCI Cancer Bulletin

Eliminating the Suffering and Death Due to Cancer

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In this issue:

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No "Magic Threshold" for PSA Screening, Study Finds

Data from the National Cancer Institute's (NCI) Prostate Cancer Prevention Trial (PCPT) published last week showed that a substantial number of men enrolled in the trial as controls were found to have prostate cancer despite consistently normal screening tests over the study period. The study results were published in the May 27 *New England Journal of Medicine*.

"This was the first systematic study of men with prostate-specific antigen (PSA) levels from 0 to 4.0 nanograms per milliliter (ng/ml)," said study leader Dr. Ian Thompson of the University of Texas Health Science Center in San Antonio. "It shows that cancer of the prostate can be present in men with 'normal' PSAs. The main study finding was that 15 percent of men in the PCPT control arm had a positive end-of-study biopsy despite having PSA levels below 4.0 ng/ml and normal digital rectal exams (DREs) throughout the study." Clinicians often use the value of 4.0 ng/ml or greater as the trigger for further investigation. A PSA level below 4.0 is generally considered normal.

The 2,950 men in the study were from the control arm of the PCPT, a 7-year NCI-funded trial evaluating the ability of the drug finasteride to prevent prostate cancer. The men received annual prostate screening

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Director's Update

An Executive Commitment to Reducing the Cancer Burden

As the baby boomer generation marches toward retirement age, we face the very real prospect of an influx of patients into our health care system with a significant disease burden, including cancer, stroke, diabetes, and cardiovascular disease. Even within the existing working population, however, the disease burden is very real. Cancer, for example, is the leading cause of death in the work force today.

In addition to cancer's human toll is its very real economic toll. Cancer's price tag for the United States alone in 2003 was $180 billion, a figure that accounts for treatment costs, lost productivity, and many other factors. So it is clear that all levels of government, organizations, and corporations have a substantial stake in helping to eliminate the suffering and death due to cancer.

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with a PSA test and a DRE. All men entered the trial at age 50 or above, had initial PSA levels of 3.0 ng/ml or less, and a normal DRE. All were asked to undergo end-of-study prostate biopsy.

The study also found that 2.3 percent of men with PSA levels of 4.0 ng/ml or less had high-grade cancers. For men with a PSA of 2.0 or less, the chance of having a high-grade cancer was even lower—1.4 percent. High-grade tumors often grow more quickly and may be more likely to spread than low-grade tumors.

"Although high-grade cancers are generally considered to be more aggressive, we need to remember that we really don't know the clinical significance of any of these cancers found in men with PSA levels below 4.0," said Dr. Howard Parnes, chief of the Prostate and Urologic Cancer Research Group in NCI's Division of Cancer Prevention.

Since the late 1980s, PSA tests have been widely used in the United States in an attempt to detect prostate cancer at an early stage. However, PSA testing has never been proven to reduce the risk of dying from prostate cancer. For this reason, NCI is currently funding a large clinical trial—the Prostate, Lung, Colorectal, and Ovarian Screening Trial—to determine whether early detection of prostate cancer through screening saves lives. In addition, not all prostate cancer detected by PSA screening is clinically relevant; therefore, screening carries the risk of overdiagnosing the disease, which may lead to unnecessary treatment. Thus, PSA testing is not a universally recommended screening procedure.

"This study tells us that there is no magic PSA level below which a man can be assured of having no risk of prostate cancer nor above which a biopsy should automatically be performed," says Dr. Parnes. "A man's decision to have a prostate biopsy requires a thoughtful discussion with his physician, considering not only the PSA level, but also his other risk factors, his overall health status, and how he perceives the risks and benefits of early detection." ◆

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Last week I attended a meeting of the CEO Roundtable on Cancer, a group comprising corporate CEOs and state governors, formed in 2001 as part of the National Dialogue on Cancer forum, which is now called C-Change. At this meeting, the group, led by Vice Chairman of Pharmaceuticals for GlaxoSmithKline, Robert A. Ingram, agreed to launch an initiative that has been under development by a task force led by Gary Reedy, Worldwide Vice President of Biopharmaceutical Public Policy at Johnson & Johnson. The program will invite organizations to adhere to a "CEO Cancer Gold Standard,™" which is a list of five priority actions meant to reduce the cancer burden in the United States.

Adopting the CEO Cancer Gold Standard means that these executives have committed to focusing on activities in five areas that will reduce their employees' and their families' cancer risk: 1) tobacco use reduction, 2) improved access to screening and early detection, 3) improved diet and nutrition, 4) increased physical activity, and 5) easier access to quality care and clinical trials. That means taking actions like sponsoring workshops with nutrition experts for their employees, ensuring that the health plans with which they contract include recommended cancer-screening provisions and educating their employees about them, offering onsite smoking cessation classes and creating support groups to help employees stop smoking, providing free fitness club memberships and developing other incentives to encourage their employees to get regular exercise, and educating patients about cancer clinical trials and working with their health plans to eliminate or reduce co-payments and other barriers to cancer clinical trial participation.

This initiative offers an outstanding "bang for the buck." Not only will taking these actions reduce the risk of cancer, they will also reduce the risk of diabetes, heart disease, stroke, and hypertension, to name just a few. There also is growing evidence that exercise and improved physical health can improve mental health by relieving the symptoms of depression and anxiety. The current CEO leadership group represents more than 30 million employees, spouses, and dependents, and with other organizations being invited to join, the potential impact is enormous.

At NCI, we believe very strongly in the benefits of collaboration and outreach. Whether it is our partnership with the Food and Drug Administration to bring promising treatments to patients more quickly or the caBIG initiative to virtually connect all researchers, we believe that there is strength in numbers. The CEO Cancer Gold Standard is an excellent addition to such efforts to eliminate the suffering and death due to cancer and NCI is very proud to be supportive of such initiatives that transform people's lives. ◆

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

Cancer Research Highlights

Researchers Develop Method to Identify Proteins in the Human Serum Proteome

In the June 2004 issue of *Clinical Proteomics*, Drs. King C. Chan, David A. Lucas, and colleagues at SAIC-Frederick, in the Laboratory of Proteomics and Analytical Technologies at NCI-Frederick, report on a new method for isolating and identifying proteins found in trace quantities in blood. These proteins are potential biomarkers to alert clinicians of certain diseases, including ovarian, breast, and prostate cancer.

The researchers crafted a multistep procedure for separating blood proteins derived from serum. Prior efforts to identify these proteins, collectively known as the serum proteome, came up short mainly because the separation steps meant to reduce amounts of large, highly abundant proteins caused a simultaneous loss of smaller, low-abundance proteins. The authors avoided this problem by using multiple separation and fractionation steps, based on the size, electric charge, and other chemical properties that differ between proteins, to produce samples that were then analyzed by mass spectrometry, a high-throughput technique for identifying individual proteins.

"Our investigation resulted in the identification of 1,444 proteins in serum," said coauthor Dr. Thomas Conrads, director of the Mass Spectrometry Center at NCI-Frederick. "The proteins identified by earlier research overlapped only slightly with those characterized by our group," said Conrads. "This emphasizes the wide scope and complexity of the human serum proteome, which has been estimated to contain more than 10,000 proteins."

The authors created a publicly available database of the human serum proteome (available at http://bpp.nci.nih.gov) to serve as a resource for other researchers

Similar Risk of Lung Cancer Among Male and Female Smokers

Results from two large cohorts indicate that men and women with comparable smoking histories have similar risks of developing lung cancer. Data analysis from the Nurses' Health Study of women and the Health Professional Follow-Up Study of men found no evidence for a greater risk of lung cancer among women who smoke, even though some previous case-controlled studies have suggested that women are at greater risk.

In a study in the June 2 *Journal of the National Cancer Institute*, an international group of researchers led by Dr. Diane Feskanich of Brigham and Women's Hospital in Boston, directly compared lung cancer incidence rates using data from 60,296 women and 25,397 men, aged 40 to 79, who were current or former smokers. Findings from the two cohort studies (with common ages and follow-up periods) do not support a greater risk of lung cancer for women.

An accompanying editorial charts the history of lung cancer research for the past century, and notes that early studies tended to show lower risks of lung cancer among women smokers—mainly because of the lag in women's uptake of smoking, women's lower average cigarette consumption, and other factors. Although some case-controlled studies in the 1990s indicated that women may be more at risk for lung cancer, the authors agree that the "clear picture that emerges from the cohort studies is that women do not have higher rates of smoking-induced lung cancer than men."

Tumor Supressor Gene Analysis May Yield New Targeted Therapies

Dr. Zhenghe Wang and colleagues from the Sidney Kimmel Cancer Center at Johns Hopkins University have sequenced the entire gene family that codes for key cellular signaling proteins, known as tyrosine phosphatases, from human cancers. According to the results of their study, published in the May 21 issue of *Science*, the scientists found mutations that affected over a quarter of colorectal cancers, as well as a smaller subset of lung, breast, and gastric cancers.

Though targeted therapies toward protein tyrosine kinases—such as the epidermal growth factor receptor (EGFR)—have been directly linked to tumorigenesis, there has not been as much investigation into tyrosine phosphatases, which directly regulate the activity of kinases and the downstream proteins in their signaling pathways.

In this study, researchers looked at all 87 members of the phosphatase gene family in 18 colorectal cancers, and identified 6 genes that were specifically mutated in tumors. They then sequenced these 6 genes from an additional 157 colorectal cancers and identified 77 different mutations, which in total were found in 26 percent of the tumors. Further examination of a subset of these mutations revealed that they reduce the function of the

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(Research Highlights continued from page 3)
phosphatase proteins for which they code, thereby hampering the ability of the proteins to regulate cellular functions such as growth, differentiation, death, and tissue invasion.

Risk Prediction Models Workshop Sets Goals

Estimating absolute risk of cancer can have profound implications for targeted prevention strategies and clinical decision-making. On May 20, more than 100 experts met in Washington, D.C., for a workshop about cancer risk prediction models. "This interdisciplinary workshop broke ground by bringing together the cancer risk prediction modeling community for the first time and helping identify the research steps needed to move this field forward," noted Dr. Andrew Freedman, workshop cochair from NCI's Division of Cancer Control and Population Sciences. Other cosponsors were NCI's Division of Cancer Epidemiology and Genetics (DCEG) and Office of Women's Health.

The workshop included four sessions on risk prediction models: applications, development and implementation, evaluation and validation, and predicting germline mutation carrier status. DCEG's Dr. Ruth Pfeiffer, workshop cochair noted, "After intensive discussions, model developers and clinicians reached the consensus that model performance should be judged in the context of specific applications, and further methodological research is needed to develop criteria for model assessment."

Priorities for future research include identifying cancer sites for which new risk prediction models are useful, finding ways to improve current and future cancer risk prediction models by incorporating new clinical and biological markers, and providing data resources and study populations for modeling and validation. ◆

Funding Opportunities

Cellular and Genetic Discovery Toward Curative Therapy in Myeloproliferative Disorders (MPD)

RFA HL-04-034
Letter of Intent Receipt Date: Jan. 16, 2005
Application Receipt Date: Feb. 16, 2005

This RFA solicits applications for research to identify new cellular and genetic markers associated with the origin and progression of myeloproliferative disorders (MPD) that can be applied to the future development of novel therapeutics with curative intent. MPDs represent a broad range of clinical entities, which creates difficulties in prompt assignment of diagnosis, prediction of prognosis, characterization of disease evolution, and research on the etiology and progression of disease.

This RFA will use the R01 award mechanism.

For more information see http://cri.nci.nih.gov/4abst.cfm?initiativeparfa_id=2101

Inquiries: Dr. R. Allan Mufson, am214t@nih.gov

Reducing Barriers to Symptom Management and Palliative Care

RFA-CA-05-013
Letter of Intent Receipt Date: Aug. 24, 2004
Application Receipt Date: Sept. 24, 2004

This RFA is to solicit applications for research directed at developing and testing interventions to reduce or overcome barriers to the delivery of appropriate symptom management and palliative care for persons living with cancer, thereby decreasing suffering and improving health and quality of life. Relative research should: 1) generate knowledge about how to reduce barriers to delivery of symptom management and palliative care, 2) address barriers for vulnerable, medically underserved, and special populations to access and receive palliative care, and 3) encourage research collaborations across disciplines.

This RFA will use NIH R01 (research project grant) and R21 (exploratory/developmental grant) award mechanisms.

For more information see http://cri.nci.nih.gov/4abst.cfm?initiativeparfa_id=2100

Inquiries: Dr. Ann O'Mara, omaraa@mail.nih.gov ◆

NCI's Division of Cancer Prevention will present a week-long course in molecular prevention August 2-6.

See http://www3.cancer.gov/prevention/pob/courses/molprev.html for more information and to register.

Iraqi Physicians Receive Training in Pediatric Oncology

As a result of a public-private partnership, the first pediatric oncology workshop for Iraqi oncologists was held at the King Hussein Cancer Center (KHCC) in Amman, Jordan April 18-19. This workshop was part of a program established for training Iraqi pediatric oncologists and other personnel as a follow-up to the June 2003 international conference, Partners Towards Helping Pediatric Cancer Patients in Iraq, held in Amman. In December 2003, a needs-assessment team sponsored by Project Hope and NCI traveled to Amman where they met with Iraqi physicians and generated recommendations for training that formed the basis for the April workshop. The workshop itself was a joint effort of NCI's Office of International Affairs, KHCC, the International Network for Cancer Treatment and Research (INCTR), and the Lombardi Cancer Center of Georgetown University. Iraqi physicians' travel to Amman was facilitated by the Iraqi Ministry of Health and the Coalition Provisional Authority in Baghdad with support from the U.S. Department of Health and Human Services.

Nine hematologists and pediatric oncologists from Baghdad, Basrah, and Mosul attended the 2-day workshop, which focused on pediatric leukemia, lymphoma, and supportive and palliative care. The distinguished international faculty included experts from St. Jude's Children's Research Hospital, the Lombardi Cancer Center, INCTR, KHCC, and the King Faisal Specialist Hospital and Research Centre of Saudi Arabia. Current management of pediatric leukemia and lymphomas was discussed in detail on the first day of the workshop and with relevance to the state of medical care currently available in Iraq. The Iraqi oncologists presented their data from individual hospitals, highlighting problems that included early mortality from infectious complications and lack of availability of chemotherapy agents, antibiotics, and blood product support. The second day of the workshop featured discussions and presentations on the management of infections in the immunocompromised patient, transfusion therapy, and end-of-life care.

In addition to the presentations at the workshop, the Iraqi physicians were given pediatric textbooks, handouts, and articles relevant to the workshop topics. Immediate educational needs, the fulfillment of which could improve the care of Iraqi children, such as continuation of ongoing training, Internet and Telesynergy® access, and help with treatment protocols, were identified. Feedback from the Iraqi oncologists at the end of the workshop was very positive, and a follow-up workshop is planned for October 2004 as part of the INCTR annual meeting, which is to be held in Cairo. Details are available at http://www.inctr.org. ◆

Community Update

NCI, NIH Officials Discuss NIH Roadmap with Cancer Organization Leaders

Speaking at a meeting last week of representatives from major cancer organizations and NCI and NIH officials, NCI Director Dr. Andrew von Eschenbach encouraged the cancer community to stay attuned to the NIH Roadmap initiative. Cancer centers and individual researchers should "stay engaged" in what is happening with the Roadmap, he advised, and "be proactive" in applying for grants and other opportunities offered through the NIH Roadmap initiative.

Representatives from the American Society of Clinical Oncology, American Association for Cancer Research, and Association of American Cancer Institutes attended the meeting. Dr. Dushanka Kleinman, NIH's assistant director for Roadmap coordination, said the meeting was the first of its kind between an NIH institute and some of its key constituent groups.

Dr. J. Carl Barrett, director of the NCI Center for Cancer Research and the NCI liaison to the NIH Roadmap effort, explained that the opportunities available through the Roadmap are grouped according to three themes: new pathways to discovery, research teams of the future, and reengineering the clinical research enterprise.

The new pathways to discovery component includes a focus on the development of "molecular libraries," imaging technologies, and bioinformatics, Dr. Barrett explained. The emerging field of nanomedicine also falls under

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this area, with opportunities for funds to launch "nanomedicine centers."

The formation of multi- and interdisciplinary teams is being encouraged via the Roadmap's research teams of the future component. "We have talked a lot about this approach at NCI," Dr. Barrett said. "I expect this part of the Roadmap to generate a wealth of ideas." The clinical research reengineering component of the initiative addresses the need for creating better integrated networks of academic centers and enhanced training, among other efforts.

Leaders from the organizations noted that they had received questions and heard concerns from their members about the Roadmap initiative, including whether cancer researchers have a bona fide role in Roadmap activities and how the application review process will work.

Drs. von Eschenbach, Barrett, and Kleinman acknowledged that the Roadmap is an ongoing process and that there are still unanswered questions and issues to work through. However, as much as any other area of biomedical research, cancer researchers and centers have the potential to play a significant role in the initiative, they said.

The Roadmap is not an all-encompassing effort to overhaul every aspect of biomedical research, Dr. von Eschenbach stressed. Meetings such as this one—which he described as "just a beginning"—are important because they will help the cancer community understand the Roadmap's goals and processes. "I'd hate for confusion to end up in missed opportunities," he said.

Visitors to the Roadmap Web site, http://nihroadmap.nih.gov/, are encouraged to sign up for the listserv to receive updates on RFAs and other Roadmap activities. ◆

Featured Clinical Trial

Comparative Study of Chemotherapy for B-Cell Lymphoma

Name of the Trial
Phase I/II Study of Bortezomib Alone or With Etoposide, Prednisone, Vincristine, Cyclophosphamide, and Doxorubicin (EPOCH) in Patients with Relapsed or Refractory Diffuse Large B-Cell Lymphoma (NCI-03-C-0096). See the protocol summary at http://cancer.gov/clinicaltrials/NCI-03-C-0096.

Dr. Wyndham Wilson
Principal Investigator

Principal Investigator
Dr. Wyndham Wilson, NCI Center for Cancer Research.

Why Is This Trial Important?
B-cell lymphoma is a cancer caused by uncontrolled growth of B cells, white blood cells that produce the body's disease fighting antibodies. This common cancer strikes an estimated 41,000 Americans each year.

Bortezomib, one of a new class of targeted anticancer drugs called proteasome inhibitors, has shown effectiveness against relapsed (worsening after a period of improvement) or refractory (treatment-resistant) blood-cell cancers in other clinical studies. This trial will compare bortezomib alone against bortezomib added to a chemotherapy combination known as EPOCH (etoposide, prednisone, vincristine, cyclophosphamide, and doxorubicin) to see which is more effective in fighting relapsed or refractory large B-cell lymphoma.

"Because bortezomib targets a pathway important in certain types of diffuse large B-cell lymphoma, we hope that it will make these tumors more sensitive to chemotherapy and, perhaps, even cause tumors to shrink on their own" said Dr. Wilson.

"EPOCH already has been shown to be a very good regimen for people with this disease," Dr. Wilson added. "With this study, the first to combine bortezomib and EPOCH, we hope to see the agents work in synergy to produce even better results."

Who Can Join This Trial?
This trial seeks to enroll 50 patients, aged 18 and older, who have relapsed or treatment-resistant large B-cell lymphoma. See the full list of eligibility criteria at http://cancer.gov/clinicaltrials/NCI-03-C-0096.

Where Is This Trial Taking Place?
Study sites in the United States are enrolling patients in the trial. See the list of sites at http://cancer.gov/clinicaltrials/NCI-03-C-0096.

Who To Contact
See the list of study contacts at http://cancer.gov/clinicaltrials/NCI-03-C-0096 or call the NCI's Clinical Studies Support Center (CSSC) at 1-888-NCI-1937. 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

2004 Tour of Hope™ Team Members Announced

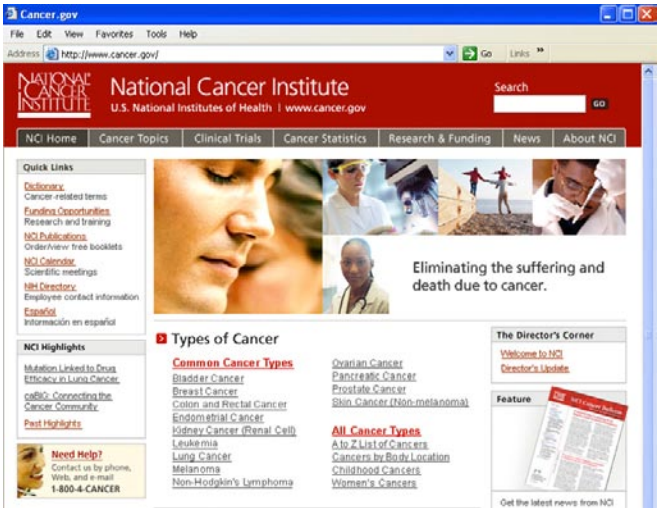
On June 1, Bristol-Myers Squibb announced the names of the 20 cyclists selected by cancer community leaders to join cancer survivor and 5-time Tour de France champion Lance Armstrong in the Bristol-Myers Squibb 2004 Tour of Hope. Almost 1,200 people applied to participate in the 3,500 mile journey October 1-8 from Los Angeles to Washington, D.C., to emphasize the importance of cancer clinical trials. In addition to being expert cyclists, all team members have been touched by cancer and have a strong commitment to support cancer research and bring the Tour of Hope's message to communities across the country. More information is available online at http://www.tourofhope.org.

Team members include Kristen Adelman, Elkridge, Md.; Colleen Chapleau, North Liberty, Iowa; John Fee, Delran, N.J.; Andrea Glassberg, San Francisco, Calif.; Brandon Hayes-Lattin, Portland, Ore.; Brian Highhouse, Meriden, N.H.; Sheila McGuirk, Madison, Wis.; Darren Mullen, Wichita, Kan.; Jim Owens, Edina, Minn.; Kathy Parker, Athens, Ga.; Rod Quiros, Suffern, N.Y.; Erika Rosettie, Corning, N.Y.; Neil Shah, Woodland Hills, Calif.; Bernie Sher, Cocoa Beach, Fla.; Michael Siegel, Wilmette, Ill.; Joseph Steele, Englewood, Colo.; Elizabeth Sterling, Millmont, Penn.; Robert Stuart, Charleston, S.C.; Stephen Verbanic, Virginia Beach, Va.; and Ted Yang, Houston, Texas.

Cancer.gov Site Redesigned

On May 26, NCI launched its redesigned Web site, http://www.cancer.gov. The site's redesign was based on extensive user research, including user interviews, ways in which users look for information on the site, and Web-usage log analysis.

The new site combines a warm, visually appealing design with an improved navigation function, enabling users to easily find the information they want most. The new home page presents information by cancer type, and the basic clinical trial search form is just one click away. Additionally, information about NCI research programs and funding has been centralized into one content area. NCI plans to continue refining its Web site to meet the needs of all members of the NCI community.



NCI at ASCO

The annual meeting of the American Society for Clinical Oncology (ASCO) will take place at the Morial Convention Center in New Orleans June 5-8. Researchers from NCI and its funded programs will be represented throughout the meeting. In addition to scientific presentations of NCI-funded research, attendees can learn about training and funding opportunities at NCI. Among the featured NCI speakers are Director Dr. Andrew C. von Eschenbach, Dr. Anna Barker, and Dr. Harold Freeman. More information about NCI's activities at ASCO is available online at http://www.cancer.gov/asco2004.

Symptom Management Trials Get Case Reimbursement Increase

Effective June 1, all NCI-sponsored Cooperative Group symptom management clinical trials will be reimbursed at the same rate as NCI-sponsored cancer treatment trials.

For the past several years, cancer treatment trials have been funded at $2,000 per case and symptom management trials funded at $1,000 per case. Reimbursement was increased to recognize the increased workload associated with symptom management trials, as well as to reinforce the importance of symptom management trials to the extramural community. Reducing the pain and suffering from cancer is a critical NCI goal and clinical trials are an essential means of determining effective regimens for cancer therapy and for alleviating symptoms of cancer or cancer treatment. More than 130 symptom management trials have been conducted since 1989.

The Cooperative Groups and several Cancer Centers are funded by the Division of Cancer Prevention as NCI Community Clinical Oncology Program (CCOP) Research Bases to design, develop, and conduct cancer prevention and control trials. For more information on the CCOP network, go to http://www3.cancer.gov/prevention/ccop/facts.html. For information on symptom management research go to http://www3.cancer.gov/prevention/coptrg/supportivecare/index.html. ◆

Featured Meetings

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

NCI Advisory Committee Upcoming Meetings

Date	Advisory Committee
June 2-3	National Cancer Advisory Board
June 24-25	NCI Board of Scientific Advisors

Selected Upcoming Meetings of Interest

Date	Meeting	NCI Speakers
June 5-8	40th American Society of Clinical Oncology Annual Meeting	Please refer to NCI at ASCO online at http://cancer.gov/asco2004
June 6-9	BIO 2004 Annual International Convention	Dr. Anna Barker, Deputy Director, Advanced Technologies and Strategic Partnerships; Dr. Kathleen Carroll, Clinical and Extramural Sciences Unit, Technology Transfer Branch
June 7	Course on Molecular Epidemiology	Dr. Joseph F. Fraumeni, Jr., Director, Division of Cancer Epidemiology and Genetics
June 14-16	3rd Annual Early Detection Research Network Scientific Workshop	Dr. Andrew C. von Eschenbach, Director; Dr. Peter Greenwald, Director, Division of Cancer Prevention; Dr. Sudhir Srivastava, Chief, Cancer Biomarkers Research Group, Division of Cancer Prevention; Dr. Lisa McShane, Biometric Research Branch, Division of Cancer Treatment and Diagnosis
June 15-16	Second Scientific Forum on Cancer and Other Tobacco Related Diseases	Dr. Mark Clanton, Deputy Director, Cancer Care and Delivery Systems

NCI Exhibits

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

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

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

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