

THE

# CANCER LETTER

Vol. 23 No. 13  
April 4, 1997

© Copyright 1997 The Cancer Letter Inc.  
All rights reserved.  
Price \$265 Per Year US  
\$285 Per Year Elsewhere

## As Zeneca Buys Salick, Implications For Oncology Managed Care Uncertain

Zeneca Group PLC last week said it would acquire Salick Health Care Inc., a company that operates outpatient cancer centers and offers cancer disease management services.

The transaction, valued at about \$234 million, completes the April 1995 agreement which gave Zeneca a 50 percent stake in Salick. Under that agreement, London-based Zeneca paid Salick \$204 million and assumed the obligation to purchase the remainder of the stock before October 1997.

It is unclear what role Salick's current management, headed by  
(Continued on page 2)

### *In Brief*

## NCI Awards Center Grant To Cancer Institute Of New Jersey; Researchers Win Honors

THE CANCER INSTITUTE OF NEW JERSEY has been awarded a clinical cancer center designation by NCI. The designation awards a \$3.2 million, three-year Cancer Center Support Grant to the University of Medicine and Dentistry of New Jersey-Robert Wood Johnson Medical School. The designation signifies that the institute has met NCI standards in demonstrating significant strength in institutional commitment, organizational capability, facilities, effectiveness of the center's director, cancer research focus, and interdisciplinary coordination and collaboration. The Cancer Institute of New Jersey, the first in the state to receive the NCI designation, is comprised of six core research programs: cancer pharmacology, carcinogenesis and prevention, cytokines, growth factors and signal transduction, molecular mechanisms of tumor growth, transcriptional regulation and oncogenesis, and clinical investigation. The institute also features multidisciplinary clinical programs in bone marrow transplantation; breast, gastrointestinal tract, genitourinary, and gynecological cancers; leukemia/lymphoma; melanoma/sarcoma; and pediatric oncology. . . . **CANCER RESEARCH INSTITUTE**, of New York, will present the William B. Coley Award for Distinguished Research in Basic and Clinical Immunology to **Stuart Schlossman**, chief of the Dana-Farber Cancer Institute's Department of Tumor Immunology, and **Daruj Benacerras** professor of medicine at Harvard Medical School, for work in identifying key molecules on the surface of lymphocytes. The award also will be presented to **Tim**  
(Continued on page 8)

### Cancer Policy:

NCAB Recommends  
Mammograms  
Every 1 To 2 Years  
For Average Risk  
Women 40-49

. . . Page 4

### Patient Advocacy:

NBCC Conference  
Issues Statement  
On Equal Status  
Of Advocates

. . . Page 7

### Funding Opportunities:

RFA, MAA Available

. . . Page 7

**This FAX edition of The Cancer Letter is provided as an upgrade to the regular annual subscription. For information, call 202-362-1809.**

## Salick, Oncology Pioneer, To Be Purchased By Zeneca

(Continued from page 1)

chairman and CEO Bernard Salick, would play in the company following Zeneca's takeover. While Salick officials said they expect to stay in charge, Zeneca is not discussing the company's management following the buyout.

"We've made no announcement about the management structure," Judith Auchard, a Zeneca spokesman, said to **The Cancer Letter**. "All we are doing is announcing the intention to complete the acquisition process."

The transaction is scheduled to be completed April 10.

Auchard said Zeneca's decision to complete the acquisition now rather than in October was motivated by the British company's strong cash position. "It seemed as good now as later," Auchard said. "Given Zeneca's very strong cash position, we decided to go ahead and go for it now."

### Aggressive Growth Strategy

Zeneca will pay \$41.15 per share for Salick stock. Had Zeneca opted to wait till the October deadline, the price of "callable" shares of Salick would have matured to at least \$42, the 1995 agreement between the two companies stipulates. Over the past year, the price of Salick stock, traded

on Nasdaq under the symbol SHCID, fluctuated between \$37.25 and \$40.87 per share.

Salick has been a pioneer in the evolution of oncology management. The company, which was founded in 1983, operates 11 outpatient cancer centers as well as a chain of dialysis centers.

Originally, a company could stay competitive by providing high-quality care efficiently. As managed care companies and the federal government began to squeeze the markups in oncology, Salick began to develop clinical guidelines and collect enough data to offer the first capitated carve-out in the US, with Miami-based Physician Corp. of America.

Later, as pharmaceutical companies began to consider expanding their role in delivery of cancer care, Salick made its original deal with Zeneca.

Since that deal, Salick has been pursuing an aggressive growth strategy that includes a plan to start a number of outpatient centers in the New York area. The centers are expected to be affiliated with St. Vincent's Hospital and Medical Center. The company's certificate of need application for a cancer center affiliated with St. Vincent's was approved recently by the New York state authorities.

The move into the New York market placed the company in head-on competition with New York-based academic institutions and attracted national attention to Salick and Zeneca. While Salick-the-man and Salick-the-company do not fear the limelight, Zeneca is generally more cautious and publicity-shy, industry observers said.

As the New York story unfolded, Bernard Salick made several pronouncements that baffled some academic oncologists and outraged others. On Aug. 12, 1996, The Wall Street Journal quoted Salick's expression of contempt for his New York rivals.

"These aren't Talmudic scholars—they're more like Keystone Kops," Salick said. The statement was interpreted as a reference to officials at Memorial Sloan-Kettering Cancer Center, Columbia-Presbyterian Medical Center, Mt. Sinai Medical Center or Montefiore Medical Center.

A month later, on Sept. 8, the lead story in the New York Times quoted Salick's description of his impact on New York hospital administrators:

"Hospital executives see me come in, and it's like watching the angel of death pull into the parking lot," Salick said.

As Salick was making these pronouncements, many observers (rivals among them) were imagining



Founded 1974

Member,  
Newsletter Publishers  
Association

Editors: **Kirsten Boyd Goldberg, Paul Goldberg**  
Founder: **Jerry D. Boyd**

**P.O. Box 9905, Washington, D.C. 20016**

**Tel. (202) 362-1809 Fax: (202) 362-1681**

Editorial e-mail: [kirsten@www.cancerletter.com](mailto:kirsten@www.cancerletter.com)

Subscriptions: [subscrib@www.cancerletter.com](mailto:subscrib@www.cancerletter.com)

World Wide Web URL: <http://www.cancerletter.com>

Subscription \$265 per year US, \$285 elsewhere. ISSN 0096-3917.

Published 48 times a year by The Cancer Letter Inc., also publisher of The Clinical Cancer Letter. All rights reserved. None of the content of this publication may be reproduced, stored in a retrieval system, or transmitted in any form (electronic, mechanical, photocopying, facsimile, or otherwise) without prior written permission of the publisher. Violators risk criminal penalties and \$100,000 damages.

reactions in London, looking up the details of the buyout contract with Zeneca, and betting that as soon as the deal is finalized, Bernard Salick would receive a gold watch and a retirement party.

### **“Expect to Age Gracefully”**

These bets are likely to be lost, said Leslie Bell, Salick president and chief financial officer.

“I expect to age gracefully in this company, as does Bernie,” Bell said to **The Cancer Letter**.

“We intend to continue to build the company and add to facilities, add contracts, and add programs.

“With Zeneca not being our partner anymore but being our corporate parent, I think we’ll be able to do it more effectively and efficiently,” Bell said.

Bell said reactions to Salick’s expressions of contempt for academic oncology ranged from praise to silence.

“[Zeneca] didn’t call up and say, ‘You idiot Yanks don’t know how to speak,’ or ‘You’re crude animals,’ or ‘How dare you say that?’” Bell said. “We didn’t receive one letter from a shareholder. We didn’t receive one letter from a patient. We didn’t receive one letter from a physician, or one letter from a politician or a citizen complaining about anything we have done or anything we have said.”

Bell said much of criticism of the company is motivated by what he described as *broyges*, Yiddish for anger.

“The competitors in New York are probably the primary source of that, because they are trying to do everything they can to make us look [like] carpet-baggers,” Bell said. “Some of the cancer facilities [in New York] have had a virtual monopoly for many years, and they haven’t had to be competitive or had to deal with managed care.”

Bernard Salick was traveling and was unavailable for comment.

### **Defining Moment?**

Industry observers are divided on the question of significance of Zeneca’s completion of the buyout.

Some said the acquisition could prove to be a defining moment in oncology, as Zeneca, followed by other drug companies, could become more active in the health care provider market, thereby reshaping the manner in which oncology adapts to the managed care environment.

Alternatively, Zeneca and other companies could recognize the potential perils of blurring the lines between selling drugs and providing care and sound

a retreat to their traditional positions, observers said.

“There are a lot of reasons to go really slow in this lane,” said one industry source who spoke on condition of anonymity. “I wouldn’t be surprised if a lot of companies would prefer to go in reverse.”

Several observers said the world has changed since Salick opened its first outpatient cancer center. In the managed care environment, the value of Salick’s cancer centers is more likely to be determined by the managed care capability built around the centers.

“They’ve got to do something other than just operate cancer centers,” said another industry source. “Somehow they have to move forward, penetrate the managed care market more effectively, and deal more assertively with payers.”

“Zeneca people aren’t disclosing whether they will be active or passive with it,” said a managed care company executive. “I suspect they will be passive. I think they are going to put it in the corner and forget about it. That way, if there is ever a possibility to do something with it, they will be ready.

“Zeneca will not be a trailblazer,” the executive said.

Bell disagrees with these assessments.

Salick has built a managed care capability that enabled it to make a capitation deal and develop a variety of services for the managed care market, he said.

“We have managed care programs to offer,” Bell said. “We can provide capitation, case rates, discounted fee-for-service, group-rate based programs. We have the capacity and the sophistication to do it. We know what goes into [appropriate care]. We know what the costs are. We have provided a full range of services on the outpatient basis. We have gotten into surgery. We’ve even gotten into doing inpatient services.

“We have the actuarial capacity, the financial capacity, and the clinical capacity to provide managed care to employers and payers. We have guidelines, we have outcome analogies, we have patient satisfaction surveys, we have quality of life surveys, we have cost studies, we have all of it.

“I really can’t conceive of anyone else who has that mix—and has the data,” Bell said.

Salick is negotiating a capitation deal with Cigna Healthcare of Arizona, sources said. However, the company only existing capitation contract faces an uncertain future as a consequence of financial troubles experienced by its client, Miami-based Physician

Corp. of America.

For the year ended Aug. 31, 1996, Salick earned \$7.6 million (\$0.67 per share) on revenues of \$163.4 million, the company said. In 1995, the company's profit was \$923,000 (\$0.09) per share and revenues \$151.3 million.

During the first quarter ended Nov. 30, 1996, the most recent reporting period, the company earned \$584,000 (\$0.5 per share) on revenues of \$45.3 million, the company said. During the first quarter of 1996, the company's profit was \$2.8 million (\$0.25 per share) and revenues \$37.5 million.

According to the company's filings with the Securities and Exchange Commission, as of January, Bernard Salick owned 941,204 shares of callable stock, which amounted to 16.6% of all outstanding shares. Under the deal with Zeneca, these shares would be valued at \$38.7 million.

Zeneca had the 1996 sales of 5.3 billion pounds (\$8.6 billion) in 1996.

### Cancer Policy

## **NCAB Endorses Mammograms For "Average Risk" Women 40-49; Screening Schedules May Vary Among Individuals**

The National Cancer Advisory Board last week recommended that NCI advise women between ages of 40 and 49 to have screening mammograms every one to two years if they are at average risk for breast cancer.

Women who are at higher than average risk for breast cancer should seek medical advice about beginning mammography before age 40 and about the screening frequency when they are in their forties, the NCAB said. For women over 50, NCI should recommend mammograms every one to two years, the board said.

The NCAB said women at "higher risk" include those who:

- had breast cancer or have been diagnosed with breast disease that may predispose to cancer;
- had two or more breast biopsies for benign disease;
- carry identified genetic alterations that may make them more susceptible to breast cancer;
- have multiple family members affected with breast cancer;
- have 75 percent or more dense breast tissue

on previous mammograms that made mammography reading difficult;

- had a first birth after the age of 30.

Women without these risk factors are considered at average risk, the board said. Health insurers should pay for mammography for higher risk women at any age, and for all women beginning at 40, the board said.

"The board concluded that there is enough evidence to support a woman's decision to begin screening in her forties," said NCAB Chairman Barbara Rimer, director of cancer prevention, detection and control research, Duke Comprehensive Cancer Center.

NCI Director Richard Klausner accepted the NCAB recommendations March 27. "We hope that these new recommendations will help clarify what has been a confusing issue for women in their forties," Klausner said. The new recommendation replaces a 1993 NCI statement.

To demonstrate consensus on what has been a divisive issue, NCI and the American Cancer Society released a joint statement saying the two organizations agreed that screening women in their forties is "beneficial and supportable with current scientific evidence."

"Both organizations recognize the importance of basing their guidance on currently available scientific evidence that shows a benefit of screening with mammography for women in their 40s," the statement said.

NCI and ACS said they would work together "to provide clear guidance to women concerning the risk of developing breast cancer and the value and limitations of screening mammography."

### **Clinton: "Clear, Consistent Guidance"**

In a White House press briefing following the NCAB announcement, President Clinton praised the recommendations and commended Rimer, Klausner, and the board for their work.

"These recommendations, based on the latest and best medical evidence, give clear, consistent guidance to women in our national fight against breast cancer," Clinton said. "Breast cancer is the most commonly diagnosed cancer among women. It affects one in eight women in their lifetimes, and has touched the families of nearly every American, including my own."

Clinton said the Administration would take action to bring Medicare, Medicaid and federal

employee health plans in line with the new recommendations:

- The Administration's proposed budget for Medicare would include funds to cover annual screening mammography beginning at age 40 for Medicare recipients.

- HHS Secretary Donna Shalala will send a letter to state Medicaid directors urging them to cover annual mammograms beginning at 40. The federal government would pay matching funds if states cover the exam.

- Clinton directed the Office of Personnel Management to require all federal health benefit plans to comply with the NCAB recommendation, beginning next year.

- The Administration will launch "a major public education campaign to make sure every woman and every health care professional in America" is aware of the new recommendations, Clinton said.

"One of the biggest fears that women have about breast cancer is the fear of not knowing what to do or when to do it," Shalala said at the White House briefing. "But today, years of confusion have been replaced by a clear, consistent scientific recommendation for women between the ages of 40 and 49.

"We can now tell all women over 40: Talk to your doctor because regular mammography can save your life," Shalala said.

"All of us should be very proud of the fact that mortality rates for breast cancer are falling, not nearly enough, but they are finally going down in this country—and all of us should be proud that with this announcement today, we have replaced confusion with clarity, and moved another step closer to the day when our grandchildren will have to turn to the history books to learn about a disease called breast cancer," Shalala said.

Members of Congress also praised the NCAB statement for providing specific recommendations.

"This recommendation clears confusion and gives women confidence that early detection saves lives, and that the benefits of mammography outweigh the risks," Sen. Connie Mack (R-FL) said in a statement.

"The United States' premier cancer research institute finally is clarifying its message, and this will save the lives of thousands of women in our country," said Sen. Kay Bailey Hutchison (R-TX).

Sen. Arlen Specter (R-PA), who had held four hearings of the Senate Labor, HHS and Education

Appropriations Subcommittee on the screening controversy, praised the recommendations, but said it took too long.

Specter held hearings in Washington, Philadelphia, Pittsburgh and Hershey, PA, following the release of the NIH consensus panel report last January.

Specter criticized the report and pressured NCI to make recommendations quickly.

"I am pleased that the record is now corrected that mammograms are warranted for women in their forties," Specter said in a statement. "I'm still perplexed about why it took so long to set the record straight.

"The Appropriations Subcommittee will be inquiring about this delay at a future hearing," he said.

### **Agreement As Well As Uncertainty**

The NCAB's ability to reach agreement shows that a consensus is emerging about mammographic screening, Rimer said. "When we talk about the benefit, the NIH consensus conference, the ACS statement and our statement are all within two percentage points in talking about the reduction in mortality," she said. "There is a great deal of agreement here.

"We hope women will talk to their doctors and come up with a schedule that best fits their needs," Rimer said.

By combining data from seven randomized trials, there is a 17 percent reduction in breast cancer mortality for women 40-49 invited for screening, the NCAB said in a three-page statement.

"To many, but not all experts, this is statistically significant," the NCAB statement said. "This level of mortality reduction appears impressive, but is actually difficult to detect with a high level of certainty because the seven mammography studies differ with regard to study design and implementation, age composition of participants and other factors.

"The currently observed beneficial effect of mammography might increase, decrease or disappear over time," the statement said. "There may be unexpected late beneficial or harmful effects of screening mammography that cannot be detected presently."

Rimer said the board's statement about uncertainty was an important point in the document.

"The reason the mammography issue has been so difficult to resolve is because the data are so

complex and the evidence is not transparent,” Rimer said. “Well-trained, well-intentioned scientists have come to different conclusions because they hold different standards of evidence.

“As the recommendations read, we caution that although we accept that there is about a 17 percent reduction in mortality, that difference is hard to detect with a high level of certainty,” Rimer said. “Like it or not, this uncertainty is a fact of life.”

Rimer said that after the NCAB meeting last February, she was not sure the board to reach a consensus. That is why she said at the time that the board would limit its recommendations to educational materials about screening (**The Cancer Letter**, Feb. 28).

“I admit that at that time I was extremely cautious and conservative, having watched the impact of this issue on groups of people in the past,” Rimer said. “I did not want to promise something that we could not deliver.

“I was convinced that the least we could do was come up with a set of educational recommendations,” Rimer said. “I wasn’t sure if people could put aside their own perspectives enough to come up with a unified statement.”

### **17-1 In Favor Of Statement**

The NCAB made its recommendations after a subcommittee of the board developed a proposed statement. After suggesting some changes, the board voted, on a mail ballot, 17-1 in favor of the statement.

The dissenting vote was cast by Kay Dickersin, associate professor of epidemiology and preventive medicine, University of Maryland School of Medicine, and co-chairman of the Research Task Force of the National Breast Cancer Coalition.

Dickersin could not be reached for comment.

Rimer said her comments about the uncertainty of the data were made in part to convey Dickersin’s viewpoint. “Different people look at the evidence and come to different conclusions,” Rimer said. “Dr. Dickersin is an excellent epidemiologist and breast cancer survivor herself who looked at the evidence and felt that the evidence did not justify a recommendation for women in their forties.”

### **Recommendations Replace 1993 Statement**

The NCAB recommendations replace the Institute’s 1993 “Summary of Scientific Fact” that said randomized clinical trials of screening mammograms had not shown a statistically significant

reduction in breast cancer mortality for women under age 50, Klausner said.

The 1993 statement had replaced a 1988 guideline developed in conjunction with ACS and other health organizations that recommended screening every one to two years for women in their forties and fifties.

“Since that time, more evidence from clinical trials accrued, leading us at NCI about a year ago to begin a process to re-evaluate our recommendations,” Klausner said at a press conference last week.

The NIH Consensus Development Conference on Breast Cancer Screening for Women 40-49, held last January at NCI’s request, provided a public forum for the presentation of the new data, Klausner said.

The consensus panel concluded the evidence was insufficient to make a recommendation for all women in their forties to receive mammographic screening. Two panel members disagreed with the majority, and in a minority opinion, said evidence supported the recommendation that women in their forties should get regular screening (**The Cancer Letter**, March 28).

The implication that NCI sought the NCAB recommendations after failing to get a positive endorsement for screening from the consensus panel is not true, Klausner said. NCI had asked the NCAB last year to use the consensus panel’s review of the data to make recommendations to the Institute, he said.

“We decided at that time that the Presidentially-appointed NCAB, representing the wide constituency of the NCI, propose recommendations for the Institute on this important issue,” Klausner said. “We used [the consensus conference] process both for the [consensus panel’s] report and to bring together experts in all different aspects of mammography to present updated data, in order to allow the NCAB to provide the advice and recommendations from this Institution.

“We never intended that [the consensus panel’s] recommendations would automatically [represent NCI],” Klausner said.

Klausner said it is appropriate for NCI to make recommendations about oncology issues.

“We are being asked to make a recommendation based upon the evidence, as we are asked to recommend about many things—treatment strategies, interventions,” Klausner said. “We are asked to make a recommendation to be used by women and physicians to make decisions. In the end, it’s their decision.”

Rimer said the NCAB statement is a

“recommendation” rather than a “guideline,” because the board wanted to encourage women, with the help of their physicians, to determine their personal risk for developing breast cancer and take an individualized approach to screening.

“We are making a recommendation about the screening interval,” Rimer said. “We expect women can come to their own conclusions. They have been doing that all along.

“Mammography hasn’t stopped because organizations have been giving different messages about this,” Rimer said.

The recommendations may change as new data emerge, Rimer said.

“The recommendations we have made are not brought forth as tablets etched in stone, but are dynamic, living and evolving,” she said. “As the science base continues to grow and evolve, NCI will share new information and adjust the advice when appropriate.”

#### **Proposed Database, Data Monitoring Board**

The NCAB also recommended that NCI take the following actions:

- Develop, in partnership with other professional and advocacy organizations, innovative methods of educating women, physicians and other providers regarding the benefits and limitations of mammography as well as the risk factors for breast cancer.

- Create a uniform database that will encourage all investigators conducting large-scale randomized screening studies for women ages 40-49 to provide primary data from combined analyses.

- Convene an independent Mammography Data Monitoring Board to review on an ongoing basis the data from randomized mammography trials and to report regularly to the NCAB and the public on the progress of the trials.

The NCAB statement is available via Internet though at <http://cancernet.nci.nih.gov>, or by phone from the Cancer Information Service, 800/4-CANCER. Document lists are available by fax by calling 301-402-5874 from a fax machine, or by email to [cancernet@icicc.nci.nih.gov](mailto:cancernet@icicc.nci.nih.gov) with the word “help” in the body of the message.

**The Cancer Letter** will be exhibiting at the American Association for Cancer Research annual meeting April 12-16 in San Diego, CA.

The editors invite readers to stop by booth 831, pick up some recent issues, and talk to us.

### *Patient Advocacy*

## **Advocates Are Equal Partners With Health Professionals, NBCC World Conference Says**

In an effort to create an international movement of breast cancer patient advocates, the National Breast Cancer Coalition last month sponsored a World Conference on Breast Cancer Advocacy.

The meeting, which was held in Brussels, centered around building an international network of breast cancer advocates to promote breast cancer issues worldwide.

“The conference endorses the status of breast cancer advocates as equal partners with health professionals, scientists, and policy makers in preventing breast cancer, improving breast cancer detection and treatment, ensuring access to quality care for all, and eradicating disease,” NBCC said in a statement released after the three-day conference.

The conference, held March 13-16, focused on advocacy training in government, science, and private industry. It was attended by over 250 survivors, activists, and health care professionals from 44 countries, including groups from Australia, Belgium, England, Gabon, India, Israel, and Panama.

## **RFA Available**

**RFA CA-97-009**

Title: **AIDS-Oncology Clinical Scientist Development Program**

Letter of Intent Receipt Date: April 25

Application Receipt Date: July 16

NCI invites applications for Clinical Scientist Development Program awards (K12) to support institutional, multidisciplinary, training programs focused on the HIV/AIDS Oncology field. The goal of the program is to train a cadre of clinicians with the highly specialized skills necessary to address the clinical and research problems associated with AIDS-related malignancies. There is an important need for trained AIDS-Oncology specialists to exploit research opportunities, conduct patient-oriented research, and provide the clinical management skills necessary for advancement in this field. There will be approximately five awards made at a total cost level of \$1.5 million for the first year, \$3.0 million for years two and three, and \$1.5 million for the fourth and final year. Maximum direct costs available per award for the first year of support of the program is \$300,000.

Inquiries: Vincent Cairoli, DCTDC, NCI, 6130 Executive Blvd Rm 520-MSB 7390, Bethesda, MD 20892-7390, tel: 301/496-8580, fax: 301/402-4472, email: [VC14Z@NIH.GOV](mailto:VC14Z@NIH.GOV)

## MAA Available

MAA-NOI-CN-75029-63

Title: **Evaluation Of Chemopreventive Agents By In Vitro Techniques**

Deadline: Approximately May 16

The NCI Division of Cancer Prevention and Control, Chemoprevention Branch, wishes to award Master Agreement Contracts for the above study. The required services will be defined by Master Agreement Orders issued during the period of performance. Pursuant to the Master Agreement Orders the contractor shall screen and evaluate the activity of chemopreventive agents in various in vitro assays relating to the inhibition of cell transformation. Agents with potential chemopreventive activity are identified by epidemiologic surveys, initial laboratory (experimental) findings, observations in the clinical setting, or structural homology with agents having known chemopreventive activity. A rigorous and systematic evaluation of these candidate agents is necessary before their efficacy can be examined in clinical trials for cancer prevention.

Recent progress in the in vitro systems has led to the development of cell culture models and techniques which make possible an evaluation of the effects of various substances on cell transformation. These systems shall allow an evaluation of the efficacy of chemopreventive agents against a variety of initiating and/or promoting substances. The end points measured in the routine assays are either direct transformation (e.g., anchorage independent growth, foci of morphologically altered cells, tumor formation in nude mice) or parameters highly correlated with transformation (e.g., production of messenger RNA encoded by oncogenes, measurement of transforming proteins, clonogenicity of cells). Defined reagents available might include: 1) cell lines of epithelial origin which can be transformed by complete carcinogens or transformed by subcarcinogenic doses of complete carcinogens or incomplete carcinogens. 2) primary cell or organ cultures of epithelial origin which can be transformed. 3) Cloned cells transformed various defined oncogenes and expressing specific transcribed messenger RNA and translated proteins which can be examined for modulation by chemopreventive agents. The transformed phenotype of such cells can be observed directly and is correlated with the levels of these substances which are measured respectively by labeled DNA probes and specific immunologic reagents, 4) Cell lines having defined quantities of epidermal growth factor and tumor growth receptors are useful substrates for evaluating analogues which might block, inhibit or compete with the growth factors. These four systems shall serve as examples or models, other in vitro systems of transformation exist and offerors shall be encouraged to propose these and other in vitro systems which they consider relevant to accomplish the proposed objectives.

The potential chemopreventive agents which can be examined by these techniques range from all of the retinoid compounds, antioxidants, growth factor analogs, inhibitors of promotion, antibodies to promoters, to synthetic viral polypeptide vaccines. Use of in vitro screening system for preventive agents shall serve to: (1) improve the criteria for selection of chemicals which shall be tested later for efficacy and toxicology in whole animal systems and for assigning priorities to chemicals for further studies, (2) improve the breadth of data on the inhibiting potential of the chemical, (3) evaluate effect on actual target sites in one or more in vitro systems, (4) decrease later toxicology testing costs by reducing number of inappropriate compounds reaching that stage in the screening sequence, (5) accelerate rate at which chemicals are evaluated. If the MAO contractor does not have equipment, facilities, expertise to carry out a portion of a workstatement, they may elect to subcontract portions to insure the optimal performance of the task. Purpose of this acquisition is to qualify contractors to a pool of MA Holders. Period of performance of MA pool will be for five years. Up to four MAOs per year will be issued pursuant to MA contracts.

Inquiries: Tina Huyck, email: [huyckt@rcb.nci.nih.gov](mailto:huyckt@rcb.nci.nih.gov). Or fax to 301-402-8579; mail to Huyck, Contracting Officer, NCI RCB, PCCS, Executive Plaza South Rm 635, 6120 Executive Blvd MSC 7226, Bethesda, MD 20892-7226.

### In Brief

## ONS Runs Toll-Free Phone Line For Information On Fatigue

(Continued from page 1)

**Mossman**, professor at the University of Alberta, Department of Medical Microbiology and Immunology, and **Robert Coffman**, associate director of immunology at DNAX Research Institute of Molecular and Cellular Biology, for their work in recognizing the existence of CD4 T-cell subsets. . . . **ONCOLOGY NURSING SOCIETY** has installed a toll-free telephone information service to help cancer patients and caregivers better understand and cope with fatigue. The hotline, 888/4-ANEMIA, is part of National Cancer Awareness Month, and can be reached from 8 a.m. to 8 p.m. EDT, the week of April 7-11. Oncology nurses will also host a three-hour discussion about cancer-related anemia and fatigue on America Online, April 8, from 7-10 p.m. . . . **CORRECTION:** Email for Barbara Redding, for the NCI Cancer Prevention Fellowship Program listed in the March 14 issue of **The Cancer Letter**, was incorrect. The correct address is: [reddingb@cdpcepn.nci.nih.gov](mailto:reddingb@cdpcepn.nci.nih.gov).