



# International Cancer News

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From the Editor

## Cancer Genome Anatomy Project Underway in U.S.A.

The National Cancer Institute (NCI) has launched the Cancer Genome Anatomy Project (CGAP) as the first project in its drive this year to improve cancer diagnostics.

CGAP has two overall goals:

1. To enhance discovery of the acquired and inherited molecular changes in cancer.
2. To evaluate the clinical potential of these discoveries.

The NCI see CGAP as the first step towards constructing a research infrastructure for the molecular analysis of cancer. The next step will be to apply these new high-volume research tools and biomarkers to clinical research, where their diagnostic and prognostic use can be evaluated and integrated into clinical care. The first two programmes of the CGAP will aim to:

- Support the development of novel technologies that scan all genes, proteins, or protein networks linked to cancer. The programme aims to develop efficient systems that fully integrate and automate the various steps involved in molecular analysis, such as sample preparation, sample analysis, data collection and data analysis. NCI intends to rapidly disseminate these new tools to all researchers.
- Compile an index of all genes that are turned on throughout the cancer process. This will allow scientists to create complete genetic profiles that differentiate between normal, precancerous and malignant cells.
- Through its Frederick Cancer Research and Development Center, the NCI will establish a new

programme to coordinate the isolation of gene transcripts and the construction of needed cDNA libraries from normal and cancerous tissue. The first cancers to be studied will be breast, colon, prostate, lung and ovary.

## Mammographic Density Reduced by Low-fat Diet

A low-fat, high-carbohydrate diet reduced the area of mammographic density—a risk factor for breast cancer, a 2-year study shows.

The Canadian Diet and Breast Cancer Prevention Study group are now following up with a longer study in a higher number of subjects to see if these changes relate to cancer risk.

## New Guidelines for Mammography for Women Aged 40-49 say NCI

The National Cancer Institute in the U.S.A. (NCI) now recommend that women at an average risk of breast cancer who are in their 40s should be screened every one to two years with mammography. Women aged 50 and older should be screened every one to two years. Women who are at higher than average risk of breast cancer should seek expert medical advice about whether they should begin screening before the age of 40 and the frequency of screening.

These recommendations were made to the NCI by the National Cancer Advisory Board on screening mammography. The Board also stated that because of mammography's limitations, it is important that a clinical breast examination by a healthcare provider be included as part of regular, routine health care. NCI will include that statement in its recommendations.

Dr Richard Klausner, NCI director, said the institute will immediately begin to

develop new educational materials to communicate the screening recommendations and to help women and health professionals determine an individual's breast cancer risk. He said that the NCI will also work with the American Cancer Society, other government agencies, advocacy organisations, cancer centres and other groups to educate the public and professionals about the benefits, limitations and risks of screening mammography.