Stanford geneticist urges research

'Concentrate on preventing cancer'

Cancer prevention is a more promising target for research than cancer cure, Stanford geneticist Joshua Lederberg argues in commenting on the federal approach to cancer research.

Lederberg, a Nobel Laureate in genetics, has retracted his earlier support of a new federal agency for cancer research in favor of a single agency.

"All health research should be knit together within a single agency, specifically an augmented and strengthened National Institute of Health," Lederberg declared Tuesday.

He expressed his views in a letter to the subcommittee on health of the Senate's Committee on Labor and Public Welfare. The subcommittee is conducting public hearings in Washington, D.C., on a bill which would remove the National Cancer Institute from the NIH and move it to an authority that would report directly to the President.

RESTRAINTS

Lederberg explained that he had publicly supported a separate cancer research agency at first because he thought a new organization might be a way to avoid traditional bureaucratic restraints.

Recent developments, including President Nixon's new public commitment to health research in general, have caused him to change his mind.

But Lederberg is firm in his conviction "Cure Cancer" is a misleading slogan.

In earlier writings, he explained his feeling is based on the belief "cancer prevention is a far more promising approach than the cure of the disease once established."

NO GLAMOUR

Lederberg admits prevention is not as glamorous as cure by surgery or radiation, commenting ruefully, "A citizen who may balk at another dollar's outlay for preventive public health will spend a fortune to root out his own cancer after the fact."

At present about one person in six dies of cancer, Lederberg said. The best available and costly treatments probably could not improve that figure below one in ten.

"This would be a notable achievement," he said, "but it would buy fewer lives per dollar spent than many other unmet opportunities.

"For really important progress we must acquire and use new knowledge for the prevention of cancer."

The greatest promise for eradication of cancer, in Lederberg's view, comes from the great leaps in basic biological knowledge of the last decade, many in studies of DNA, the genetic material in viruses.

These have given only a few answers closely connected with human cancer, but "we are now able to formulate sensible questions about the nature of the cancer cell and the origin of its deadly differences from normal."

The strongest hopes for preventive measures are based in the fact that there are changes in cancer incidence in different eras and in different occupations and geographical areas.

FACTORS

"They speak of the importance of specific environmental factors rather than letting us acquiesce ignorantly to cancer as an inevitable lightning bolt," he said.

Lederberg believes many forms of cancer will be found to be related to known environmental hazards—chemicals to which people are exposed at work and home, and chemicals used as food additives or drugs.

"This area, more than any other," he commented, "needs only money to give prompt returns in reducing environmental cancers."

Another area where he expects important advances in control of cancer to come from is in the field of immunology.

He said immunologists now believe that many incipient cancers are normally eliminated in the healthy body. However, a weakening of the immune system may allow a cancer seed to escape this surveillance and grow.