

The NIH Record

Asian-Pacific Heritage

NIH Observance on May 9; Color Posters Available

Lamentations have been many in recent years by disappointed NIH'ers who couldn't get a copy of the multicolored silk screened NIH Asian/Pacific American Heritage Week poster.

The posters have become collectors' items. NIH'ers even have offered to buy them.

This year for the first time, a limited quantity of the five-color 1986 Asian/Pacific American Heritage Week posters will be available for sale on a first-come basis.

The theme of this year's May 9th observance at NIH is Celebration of Life. The 1986 poster depicts the East Indian dancing Shiva.

In the various Indian traditions Shiva is understood in one of two contexts: Shiva is sometimes seen as the third of three aspects of God (Creator, Sustainer and Destroyer). In that context Shiva represents God's function to destroy the individual's illusion of separateness from God.

Shiva also represents God without aspects: as the all-pervasive, Supreme Creator of Everything. In this context Shiva performs the dynamic dance of creation.

This year, NIH's entire celebration of the Heritage Week will take place on Friday, May 9, with noon-hour booths and tables on the Bldg. 31A outdoor patio, and an evening program in the Clinical Center's Masur Auditorium.

From 11:30 a.m. to 1:30 p.m. there will be various demonstrations and food for sale on the patio outside Bldg. 31A.

At several tables both the hungry gourmand and the idle nibbler can purchase Chinese, Korean, Thai, Phillipino, Japanese and Indian delicacies.

The 1986 poster will be sold at one table, and NIH artist Al Laoang will be present to autograph each poster.

There will be three demonstrations beginning with the NIH Tai-Chi Club demonstration at 12-12:15 p.m., followed by the NIH Judo Club demonstration at 12:15-12:30 p.m., and ending with a Bonsai demonstration at 12:30-1 p.m.

Seating at the 7:30 to 10 p.m. evening program in the Clinical Center's Masur Auditorium will be on a first-come basis, so it will pay to arrive a bit early.

The program will consist of traditional dance and music—both instrumental and vocal—from Japan, Korea, Thailand, Vietnam, Malaysia, China, Burma and India.

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AIDS Virus Zapped by Removing Key Gene; Potential AIDS Vaccine Developed at NIH

Two potentially significant developments in the fight against AIDS, now an invariably fatal disease, have been recently reported by teams of scientists at NIH.

Two accounts of the developments—one, inactivation of the AIDS virus by removal of a key gene and the other, development of a possible AIDS vaccine—follow:

Alterations of a key gene of HTLV-III, the virus that causes AIDS, render the virus harmless, according to two independent research teams, one at the National Cancer Institute and the other at Harvard's Dana-Farber Cancer Institute. The gene is called the transactivator (tat). The finding is expected to speed development of new types of anti-AIDS drugs.

HTLV-III, unlike most other retroviruses, has the ability to tremendously accelerate its own production. The speed-up is accomplished by the transactivator. This gene acts not only to speed up its own production, but also speeds up the reproduction of other virus components.

Researchers used gene-splicing techniques to remove genetic information that encodes the tat protein. The result, which surprised the researchers, is a virus incapable of growth.

There are several potential clinical consequences of this finding. Since the transactivator gene is necessary for virus growth, drugs that prevent the transactivator gene from working should also prevent the virus from growing. Drugs that block either the transactivator itself, or prevent interaction of the transactivator within the virus, should stop its spread.

Such drugs might have a selective action against the virus, and therefore may not be toxic. The transactivator of HTLV-III is not present in normal cells, and therefore drugs that act against the transactivator should not affect normal cell growth.

These experiments could also provide an avenue for vaccine development. The virus lacking the transactivator gene, produced by cells which contain the transactivator gene, looks exactly like the real virus. However, the virus without the transactivator gene is dead. This dead virus contains all the viral proteins in all the correct conformations. However, the virus can't grow because it can't make its own transactivator gene. Such an intact—but dead—virus might be useful for a vaccine as it should appear to the immune system as if it were the deadly virus itself.

The National Cancer Institute research team is directed by Dr. Flossie Wong-Staal, and Harvard's Dana-Farber Cancer Institute research team is directed by Dr. William A. Haseltine. □

A recombinant vaccinia virus engineered by NIAID and NCI scientists can be used as an important new tool in the study of acquired immune deficiency syndrome (AIDS) and may have potential as a vaccine against the disease.

Scientists anticipate that the new recombinant virus will be useful in studying how HTLV-III envelope proteins are made and what immune mechanisms might offer effective protection against the AIDS virus.

When injected into mice, the recombinant virus stimulates production of antibodies to the HTLV-III envelope proteins. Whether or not these antibodies can protect against infection with the AIDS virus is not yet known. The recombinant virus cannot cause HTLV-III infection of cells because only the envelope gene of the AIDS virus is included.

Further study is needed to learn whether antibodies to the envelope proteins can reduce the infectivity of the AIDS virus and if vaccination that stimulates these antibodies might be protective.

Vaccines in general are designed to protect uninfected persons against disease. Scientists anticipate that an AIDS vaccine probably would not benefit persons already infected with HTLV-III.

The study was reported in *Nature* (Apr. 10, 1986) by Drs. Sekhar Chakrabarti and Bernard Moss from the National Institute of Allergy and Infectious Diseases, and Drs. Marjorie Robert-Guroff, Flossie Wong-Staal and Robert C. Gallo of the National Cancer Institute.

The investigators used a technique developed in Dr. Moss's laboratory to turn the vaccinia virus originally used as a vaccine against smallpox into a vector to express genes from other microorganisms. □

Time of Dyer Lecture Changed

The 1986 R. E. Dyer Lecture will be delivered at 3 p.m., Apr. 23, not 8:15 p.m. as previously announced.

The lecture by Dr. Leroy E. Hood of the California Institute of Technology, an eminent expert on immunology, will be at the Clinical Center's Masur Auditorium. □