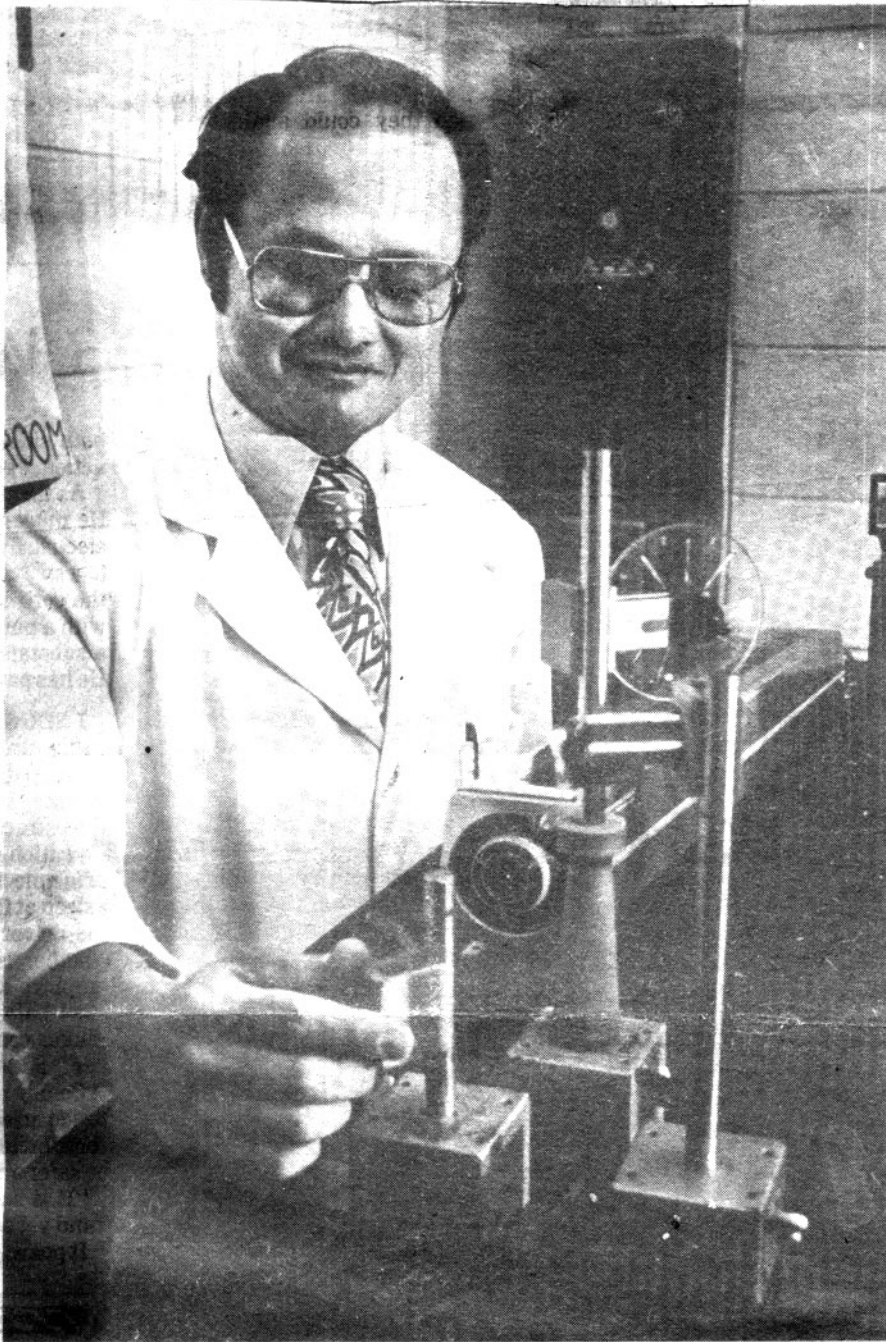


# Suburban Trib

Lake County  
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Trib photo by Jan Housewerth

Dr. Tung H. Jeong, head of the physics department at Lake Forest College, makes a minor adjustment on his equipment used to create three dimensional images of objects by using a low-powered laser.

## Future image is here today

By Ellen Holstein

IN A WORLD of computerized banking, space exploration, microwaves, and Concorde jets, the gap between science fiction and reality grows steadily narrower.

As another in an endless series of products appropriate for daily use, borne of the wild imaginings of the scientific community, consider the holographic belt buckle, a \$15.95 piece of kitsch that weds the latest in laser photography to the finest of gilded frames.

As light hits the plastic center of the seemingly empty buckle, a three-dimensional "touch-me-I'm-real" rose appears. It is not a picture of the rose, but the rose itself, that seems to be encapsulated in the frame.

**THE BELT BUCKLE** is but a trinket to dramatize the multiple uses of holography, or three-dimensional photography, in the hands of a wizard in the field, Dr. Tung H. Jeong, head of the department of physics at Lake Forest College.

Jeong, 43, is one of the country's top names in holography, a field that had its origins in the research of a British scientist, Dennis Gabor, who invented the basic ideas of laser beam photography in 1947 and received a Nobel prize for the feat in 1971. Jeong has worked extensively to popularize holography among college professors in America, and in 1971, he began three years of cross-country travel "spreading the gospel," as he wryly puts it.

Now the word is out. Jeong says holography as a tool of physics is in college curriculums. Even bright high school students are learning about the photographic process, which basically involves placing a conventional piece of black-and-white film on an object, then creating the three-dimensional aspect by exposing the film to a low-level flash of light from a laser. Jeong says the light's power is equal to one thousandth of one watt.

**LISTENING TO** the cherubic professor is **Please turn to page 3**

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like watching someone spin spaghetti onto a fork: It gets thicker and thicker until it's almost too much to swallow.

Jeong has designed a holographic camera and a viewing mechanism. The mechanism is a cylinder of film, something like a lucite lampshade, for projecting three dimensional images in motion. In his lab, when he sets the cylinder on a revolving base centered around a light bulb, moving images of his children, real enough to pinch, appear on the screen.

Holography is fast becoming an art form, although it has practical applications as a scanning tool in industry and for storing computer data. Jeong says Salvatore Dali used three dimensional images in his paintings 10 years ago.

Jeong is founder and trustee of the Museum of Holography in New York City, where holographic photos, among them a three dimensional likeness of Jeong, hang.

**THE RUSSIANS** have begun holographing priceless artifacts that hang in museums such as the Hermitage, and Jeong owns a replica of a solid gold piece from the collection of Peter the Great that was presented to him when he lectured on holography in Russia in 1976.

Jeong says that in the future, the Russians

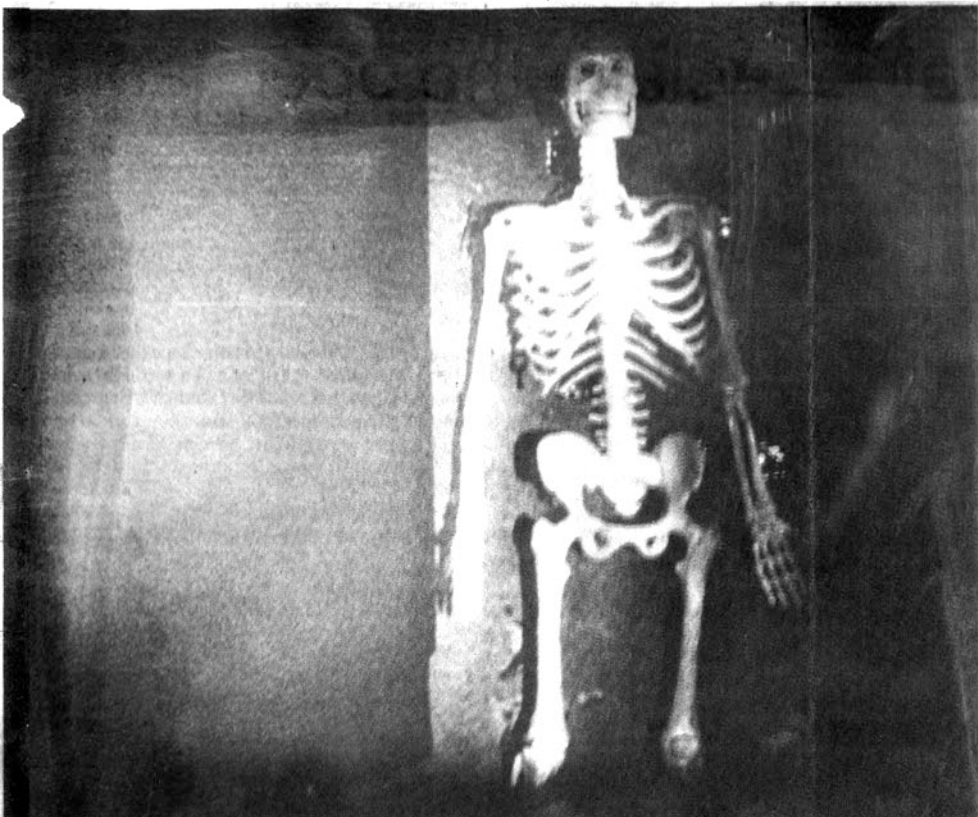
will distribute such likenesses, rather than send their art objects out of the country for display.

The general public now has access to acquiring the tools of this bit of scientific pizzazz. There is a new school in Chicago, the Fine Arts Research & Holographic Center, 1134 W. Washington, that offers courses in holography as an art form and a developing technology. Jeong is a special consultant to the staff, several of whom are former pupils of his in the special class in holography he teaches each spring at the Lake Forest campus.

**ONE FORMER** student is Bob Grycowski of Milwaukee, who is starting a distributorship called Ultra-Image to sell "imports or Japanese-made goods containing holographic images" and to create three dimensional photos as portraits.

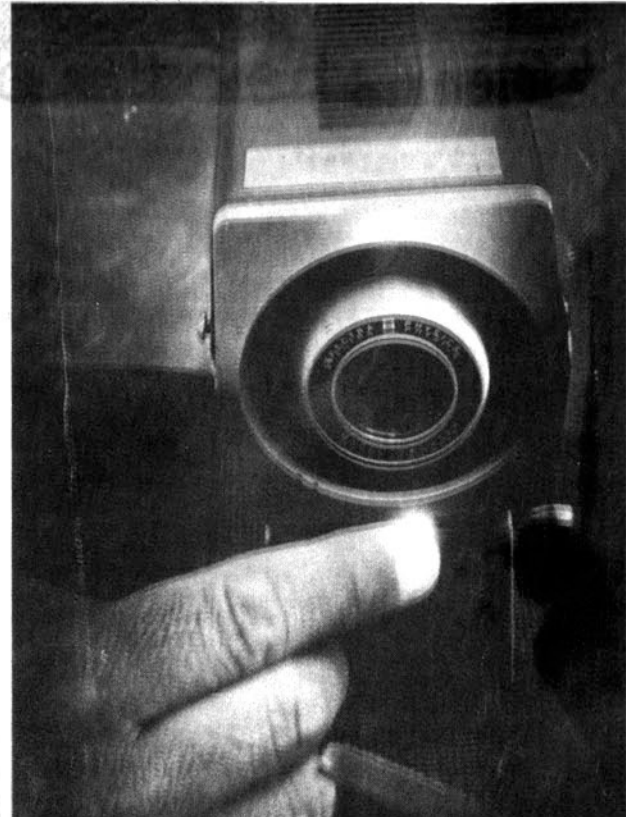
Grycowski says the process is safe, because the subject is photographed with a conventional camera, and the film is then scanned with a laser.

The adaptations of holography are endless. Grycowski speculates, for instance, that the three dimensional portrait may split the porn photo business wide open and that soon "pornograms" will be a popular aspect of holograms.



Trib photos by Jan Housewerth

This is a holograph of a skeleton. A photograph defeats the purpose of the holograph since a holograph is a three dimensional image of an object. It is produced by a low-powered laser (right), whose power is not much more than one thousandth of a watt.



## Holography making its mark