

Human Body Genetics & Medical Technologies

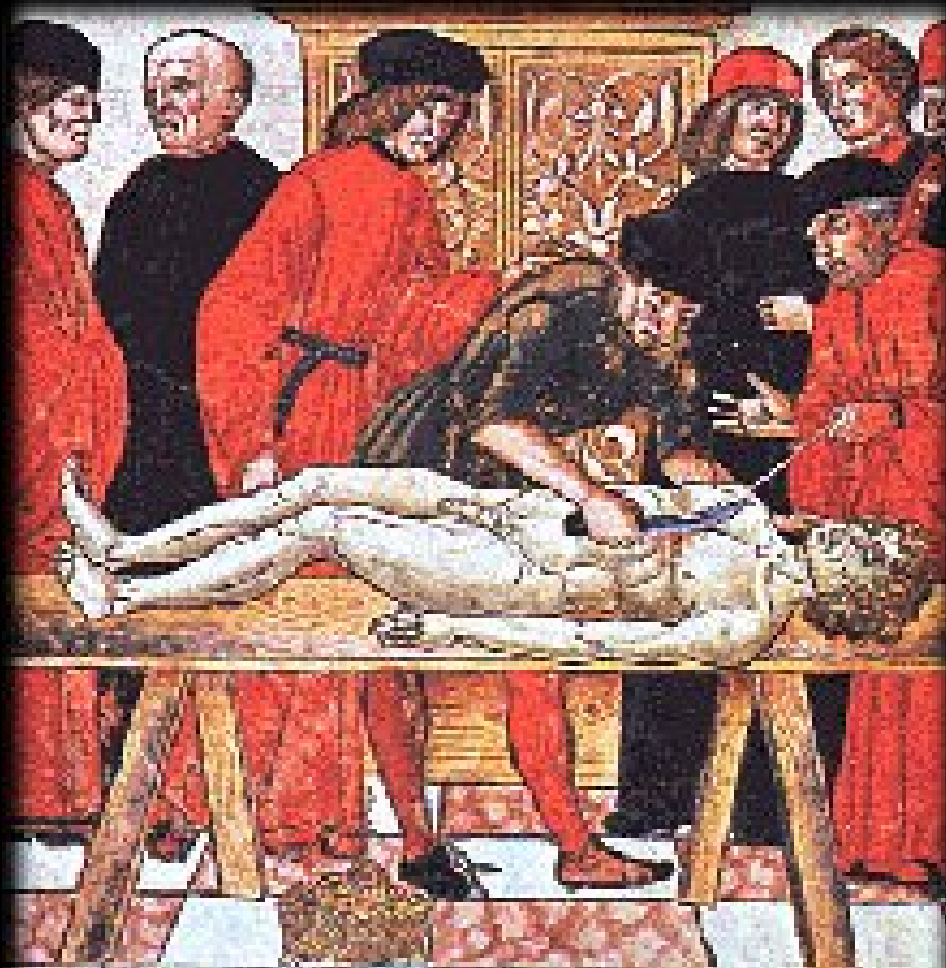
HC177: Biotech & Art

“We used to think fate was in our stars. Now we know, in large measure, our fate is in our genes.”

JD Watson, 1989

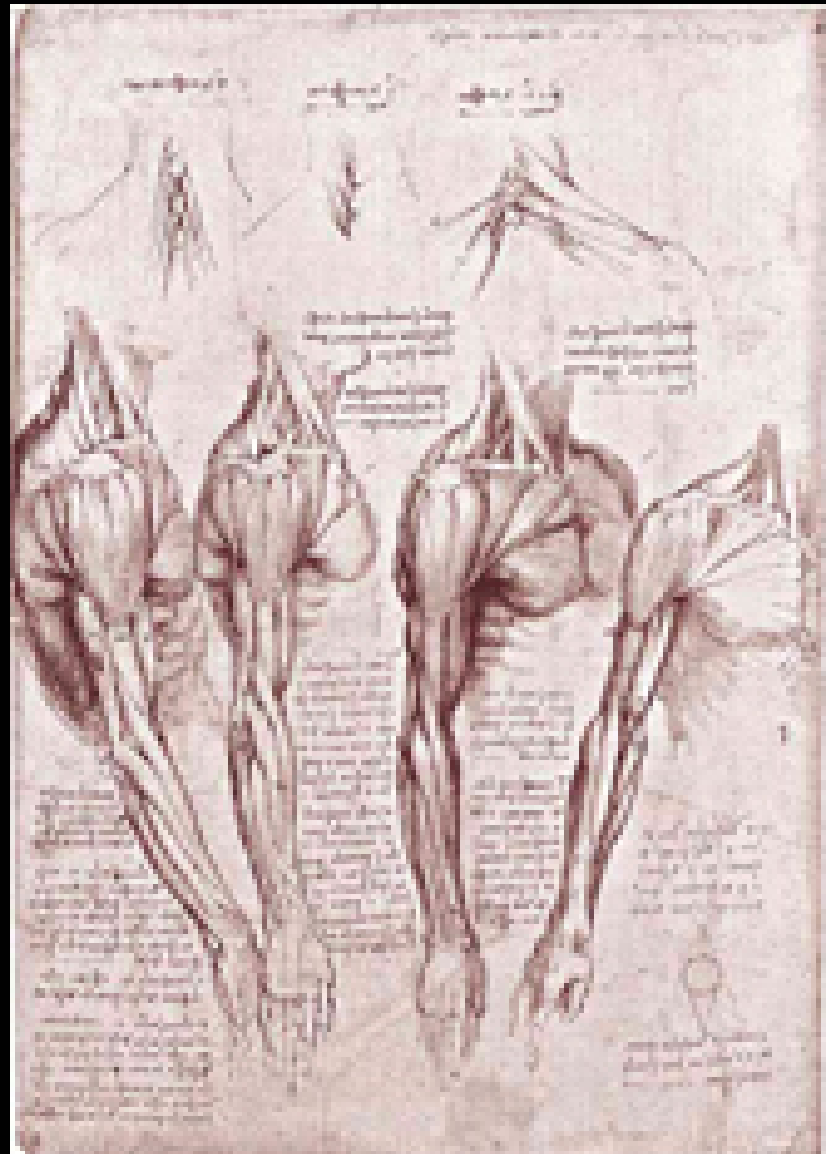
Human
BODY
&
Medical technologies

HUMAN DISSECTION





The Anatomy Lesson of Dr. Nicolaas Tulp,
Rembrandt van Rijn (1606–1669)



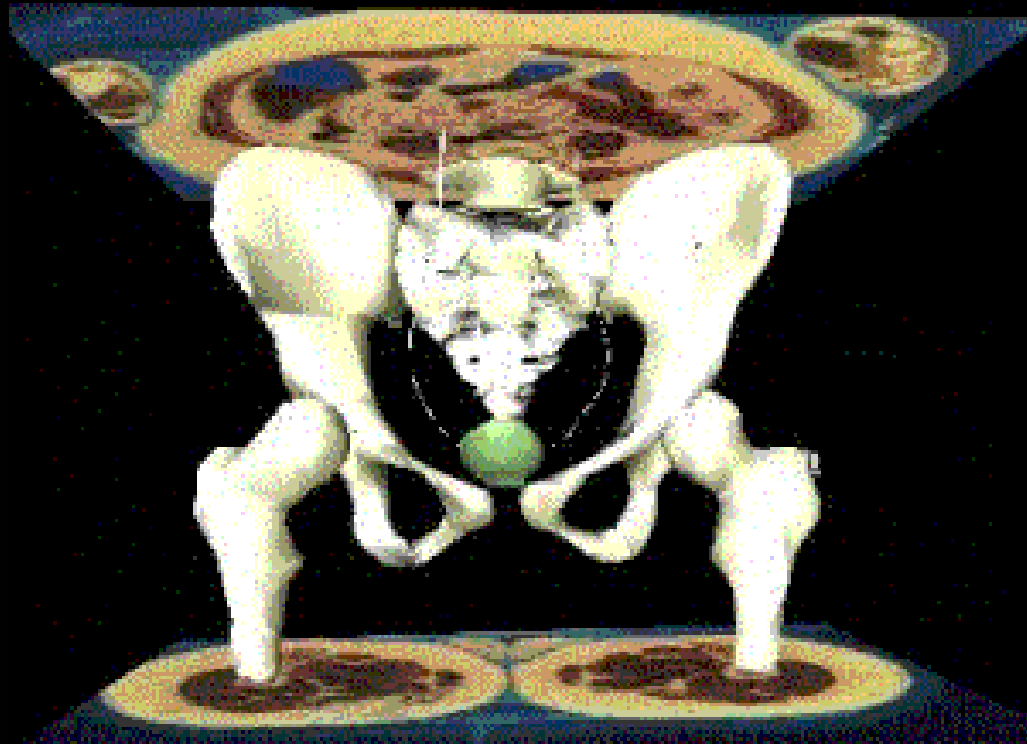
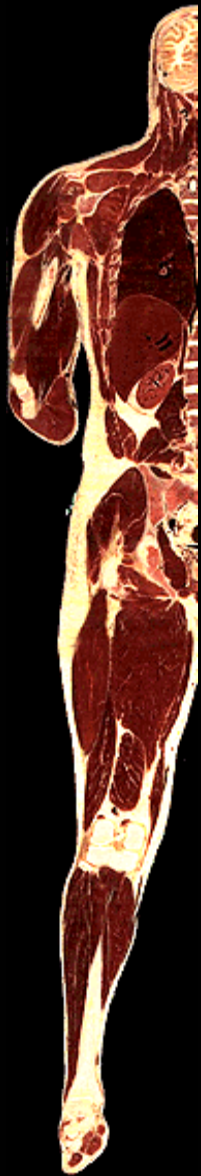
Leonardo da Vinci performed private studies, in which he dissected human bodies. These formed the basis for his detailed, lifelike, anatomical drawings. He thus made a significant contribution to social acceptance of the study of the human body.

PLASTINATION



Invented by German anatomist Dr. Gunther von Hagens in 1977, is a process whereby all bodily fluids and soluble fats are replaced with reactive plastics that harden after curing with light, heat or gas. All tissue structures are retained.

VISIBLE HUMAN PROJECT



HUMAN GENOME PROJECT



April 25, 2007 - On April 25, 2007 – the fifth anniversary of National DNA Day, the House passed the Genetic Information Non-discrimination Act of 2007 by a vote of 420-3.

DIGITAL BODY

DATA BODY

CORPORATE BODY

Invention of X-rays



Mrs. Röntgen's hand, the first X-ray picture of the human body ever taken.



X ray machine, 1910

medicine included Insulin and Penicillin



HAMLIN'S

WIZARD OIL



BEST PAIN REMEDY ON EARTH

THE CALVERT TRADING COMPANY
NEW YORK

HIS HOLINESS POPE LEO XIII AWARDS GOLD MEDAL

In Recognition of Benefits Received from



VIN MARIANI

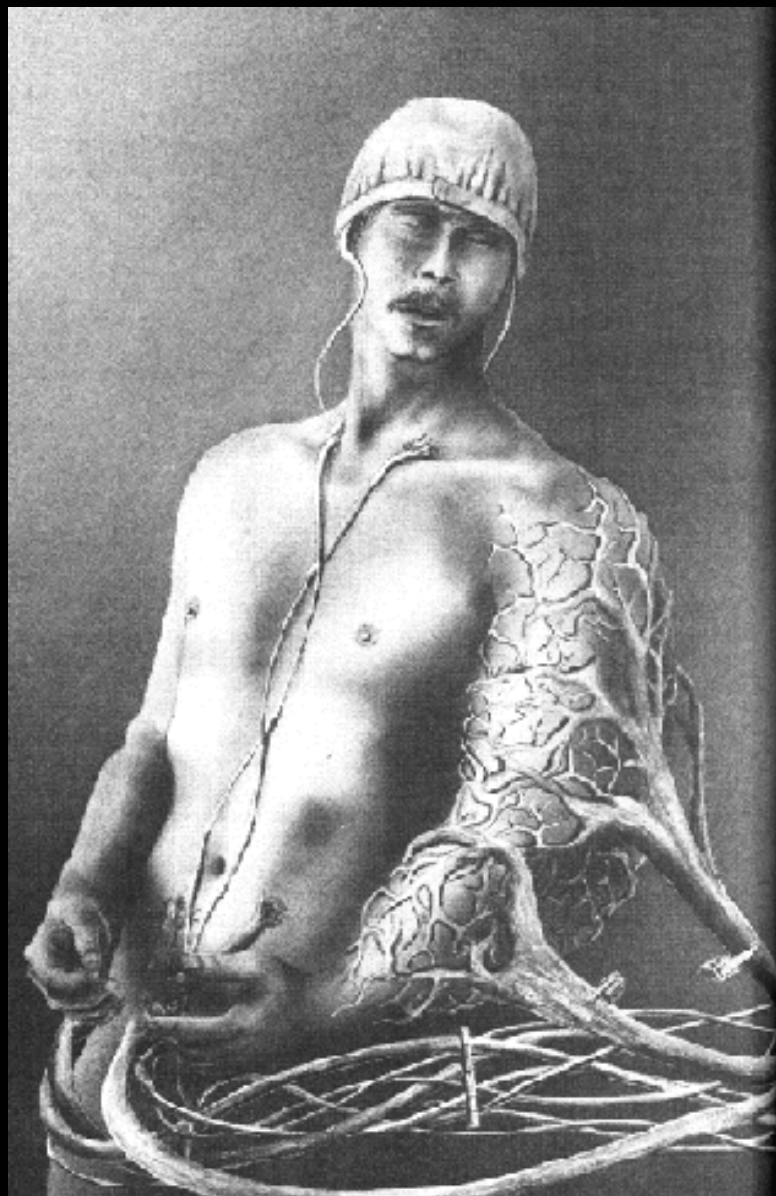
MARIANI WINE TONIC

FOR BODY, BRAIN AND NERVES

SPECIAL OFFER - To all who write us mentioning this paper, we send a book containing portraits and endorsements of EMPERORS, EMPRESS, PRINCES, CARDINALS, ARCHBISHOPS, and other distinguished personages.

MARIANI & Co., 52 WEST 15TH ST. NEW YORK.

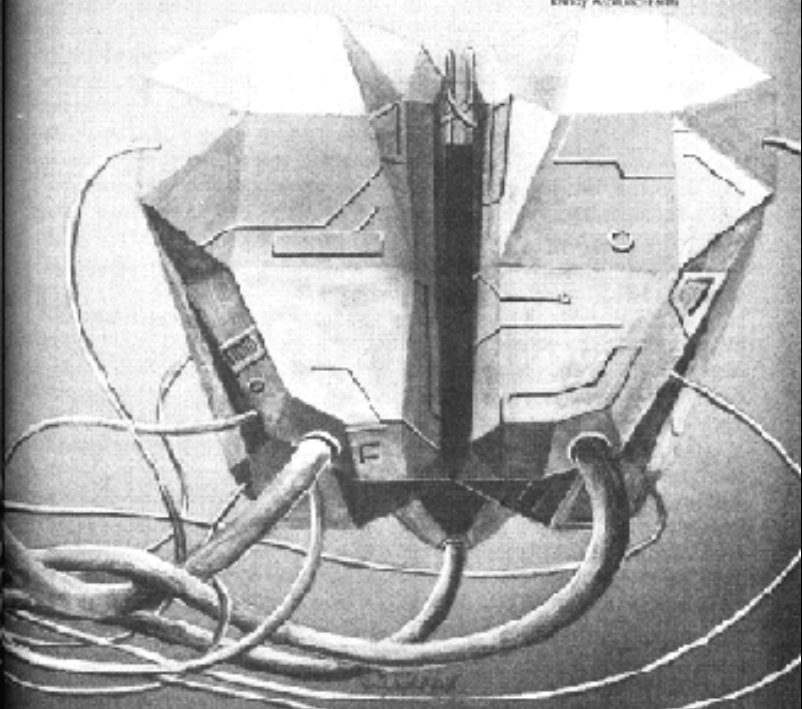
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24TH CENTURY MEDICINE

Thomas Donaldson

WITH ALEXANDER

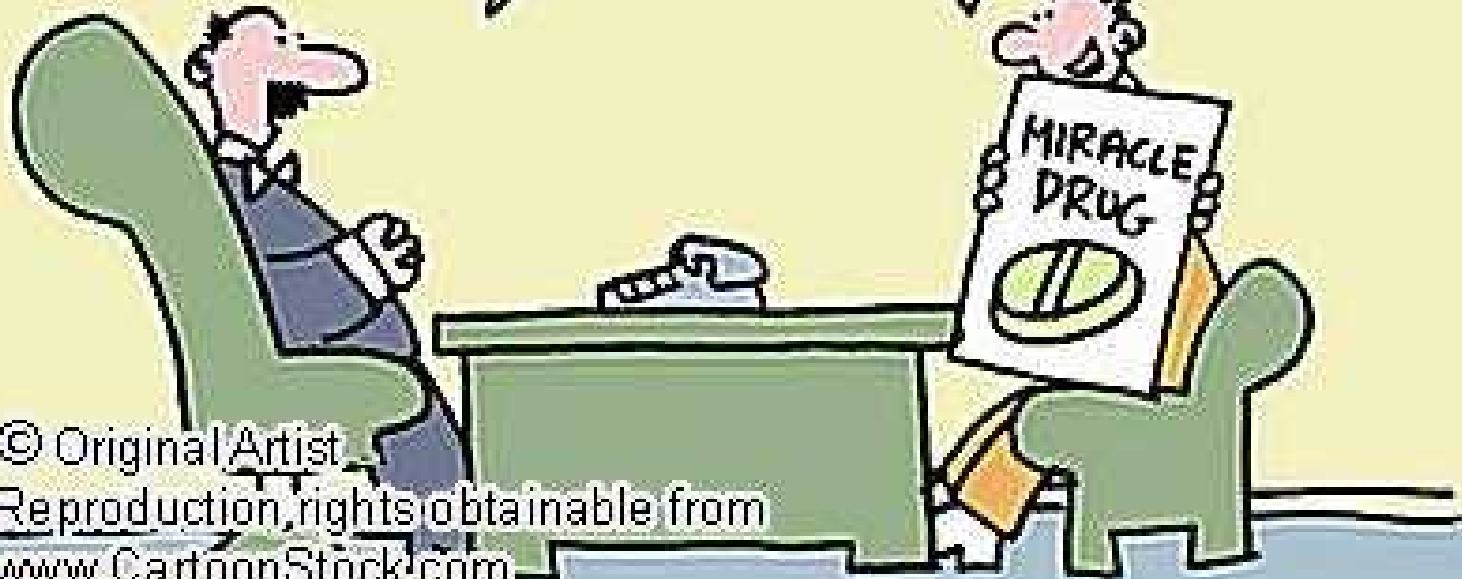


Pharma & Money



WHAT DO YOU
MEAN, "MIRACLE
DRUG"?

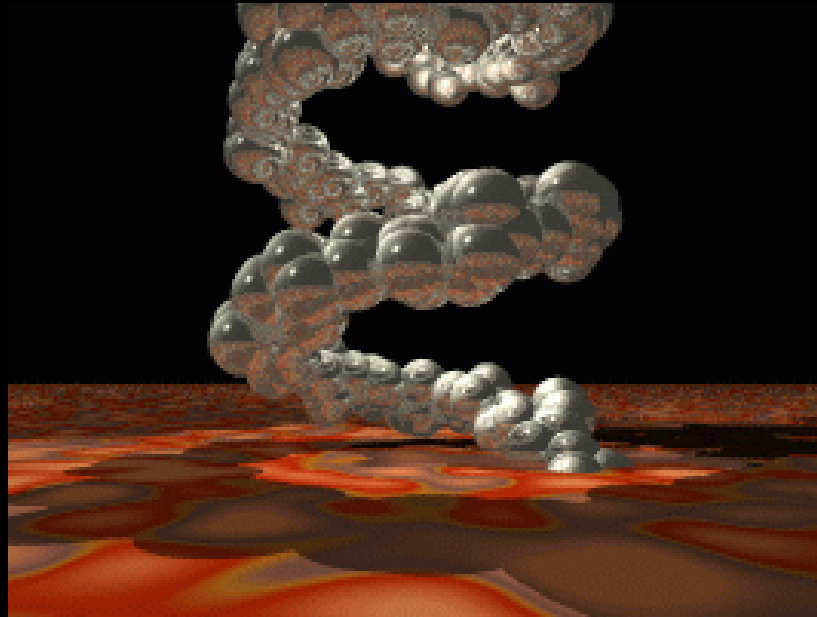
IT'S MADE AN
ENORMOUS PROFIT
FOR US!



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TRANSHUMANISM



CRYONICS

In 1964, physics teacher Robert Ettinger published *The Prospect of Immortality*, a book which promoted the concept of cryonics to a wide audience. Ettinger subsequently founded his own cryonics organization.

This "bigfoot" Dewar is custom-designed to contain four wholebody patients and six neuropatients immersed in liquid nitrogen at –196 degrees Celsius. The Dewar is an insulated container which consumes no electric power. Liquid nitrogen is added periodically to replace the small amount that evaporates.



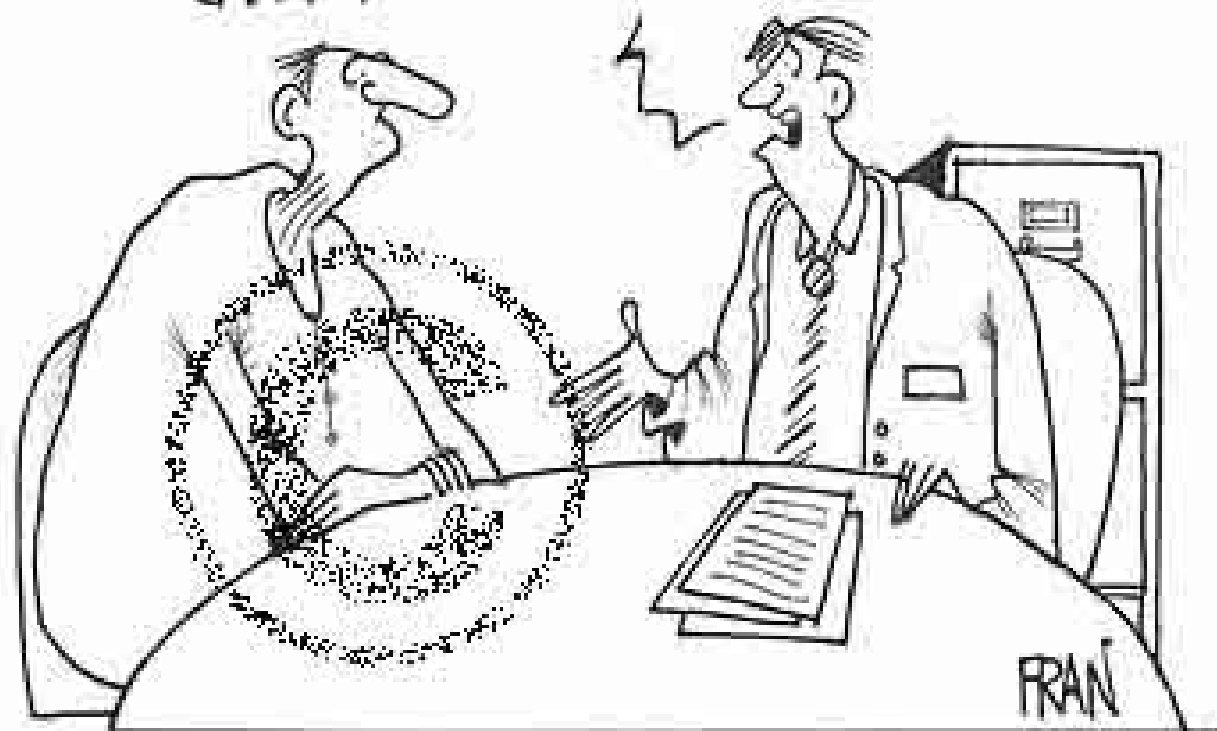
Body modification







YES, MR WILSON, FACE TRANSPLANTS ARE
A THEORETICAL POSSIBILITY.. AND NO . YOU
CAN'T HAVE BRAD PITT'S







plastic surgery-not a game



Octo Mom



Male Pregnancy

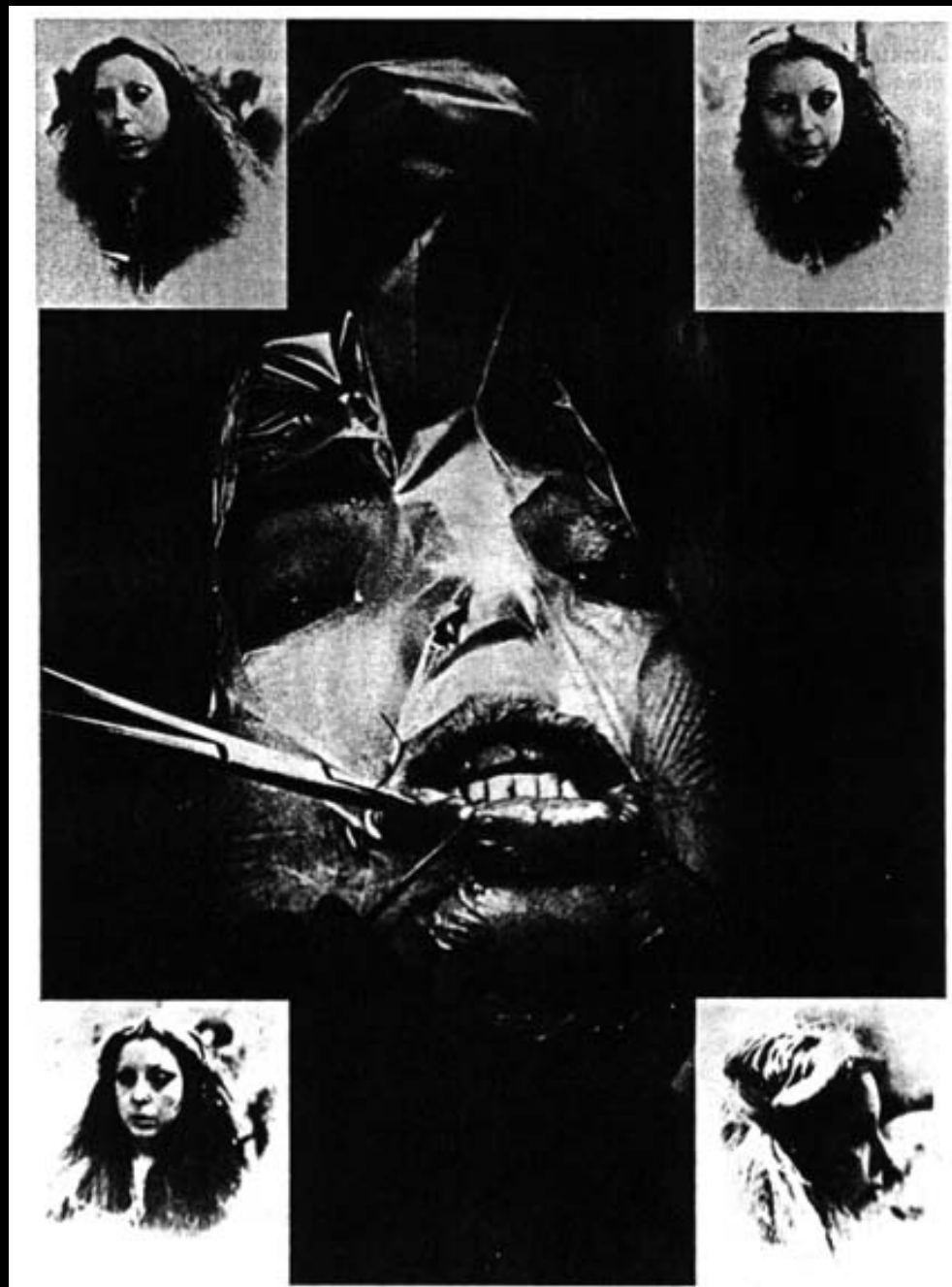




she's 60 and estrogen enhanced



ORLAN









Regrowing Body Parts



The man is wearing a camouflage military uniform with a name tag that reads "SCHWARTZ" and a US Army patch. He is standing at a podium with a microphone and gesturing with his hands. The presentation screen behind him displays the following content:

Regenerative Medicine Examples: Tissue Engineered Ear



By Charles Vacanti



BEFORE cell seeding



AFTER 2 weeks in cell culture



Scaffold in the shape of a human ear



- Above, a polymer scaffold before and after seeding with chondrocytes for regeneration of a nose. Note the place for the nostrils at the bottom of the polymer scaffold. On the left is an image showing an engineered human ear replacement in tissue culture. Images contributed by the laboratory of Professor Langer at MIT.
- These artificially grown body parts are part of AJIBM's goal to regenerate the facial features of seriously injured service members such as the person shown on the right (image reproduced with permission from US Army MPRC). First clinical trials using this technology could start in about 2 years.

DNA in the market

See your genes in a whole new light.

TIME Magazine's 2008 Invention of the Year, now \$399.



Mother's Day Special: \$399

Health and Traits



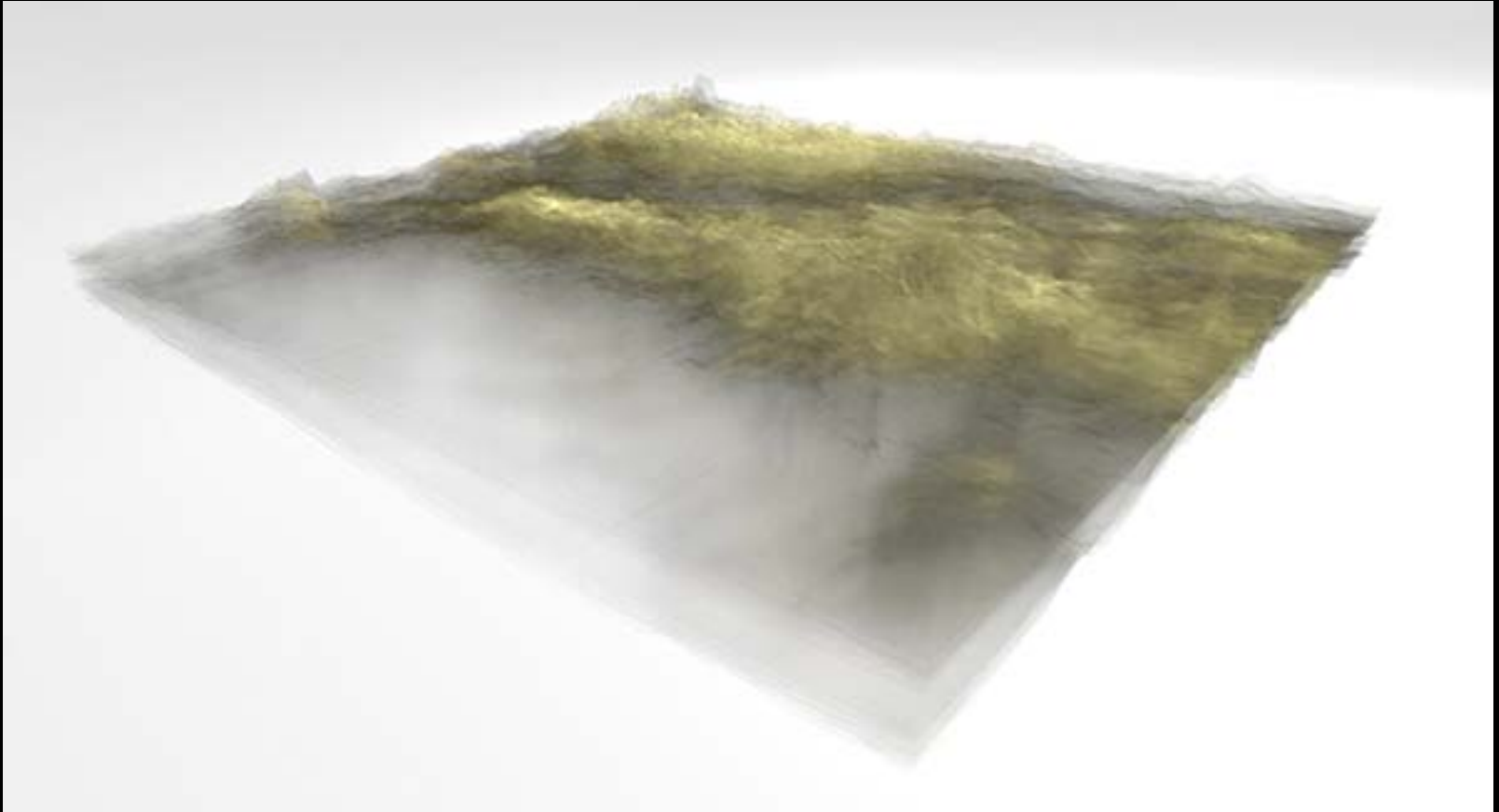
Ancestry



Sharing and Community



Biotech Art & Body



Nancy Burson



Jennifer Willet



Kira O'Reilly



Events

Natalie Jeremijenko

Lisa Jevbratt

Gil Kuno

Katherine Hayles