#### From The Anatomy Theater in Padua to Body Worlds

500 years of public anatomy, innovation and Ethical Issues
or
500 Years of Science Communication

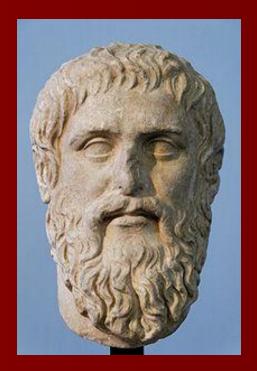
Tal Berman; The Israel National Museum of Science, Technology & Space; Haifa, Israel.

Erice; May 2010



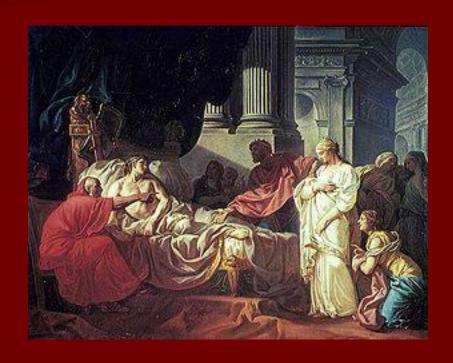
Tutankhamun's mummy

## The Dualism of Body & Soul



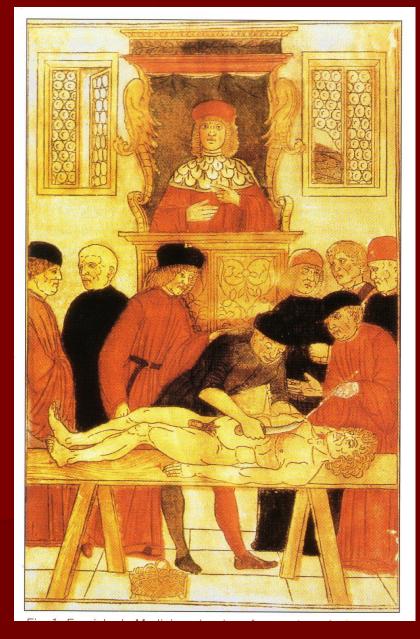
#### Plato:

there is difference between body and soul. The body as only a temporary housing for the soul.

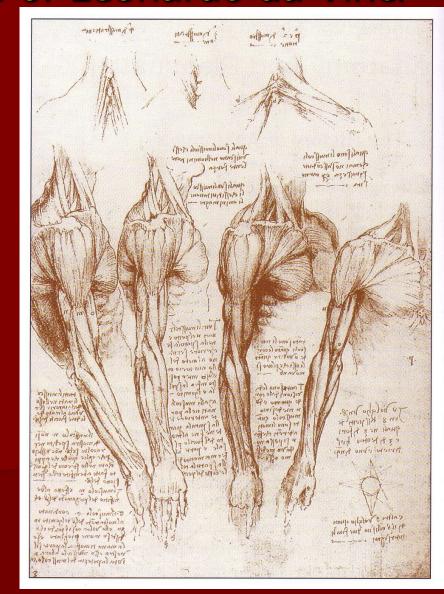


Erasistratus discovers the cause of the illness of Antiochus. Painting by Jacques-Louis David (1774)

Fasciola de Medicina, drawing of an anatomy lecture, 1493. The professor read from the books of Galen, while his assistants performed the dissection.

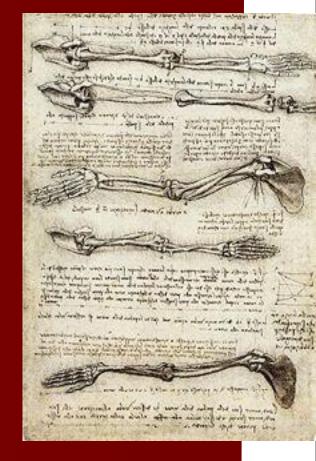


#### Anatomical Studies of Leonardo da Vinci





A page from Leonardo's journal showing his study of a foetus in the womb (c. 1510)

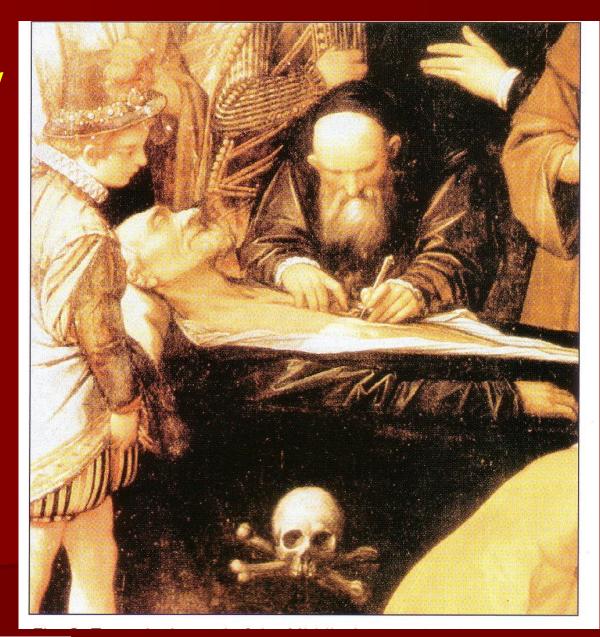


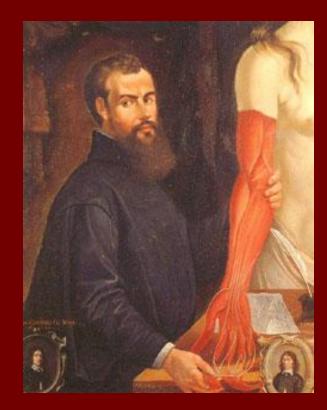
Anatomical study of the arm, (c. 1510)



The Vitruvian Man (c. 1485)

#### Michelangelo dissecting a corpse





Andreas Vesal (1514-1564), founder of the science of anatomy

# "Theatre of Anatomy"

frontispiece illustration for Andreas Vesal's seven-volume opus *On the Fabric of the* Human Body. It shows Vesalius performing a dissection in a crowded theatre. Like many Renaissance paintings, this illustration is filled with symbolisms and allegories (1543).

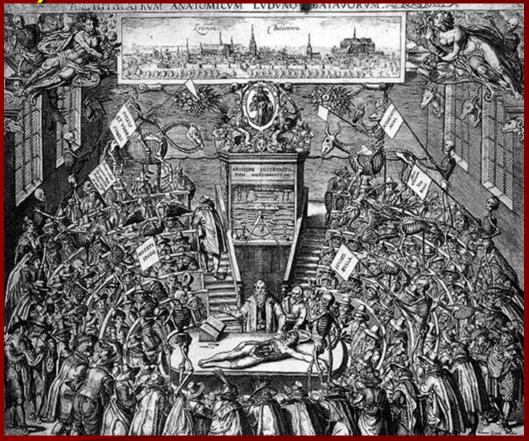




Vesalius's skeleton at the Institute of Anatomy of Univ. of Basel (1543)

## **Anatomical Theatre**

Autopsy – to see with one's own eyes



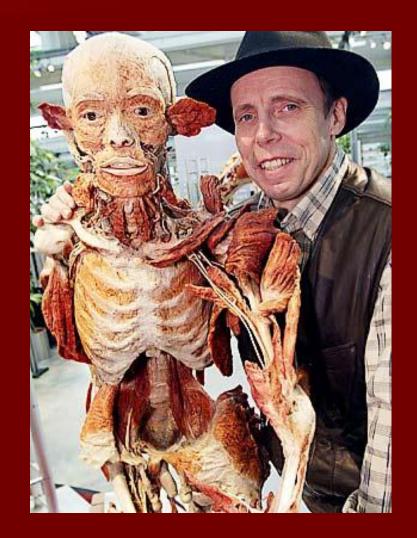
Leiden Univ. early 17<sup>th</sup> century

#### Dr. Tulp's Anatomy Lesson by Rembrandt; Amsterdam, 1632.



- Why was it a success?
- Way & When did it stopped?

Gunther von Hagens, invented the **plastination**, technique to preserved human bodies and body parts. University of Heildelberg, 1977



# **Plastination**





# The Buildina 1924 - 2010





### The Israel National Museum of Science, Technology & Space

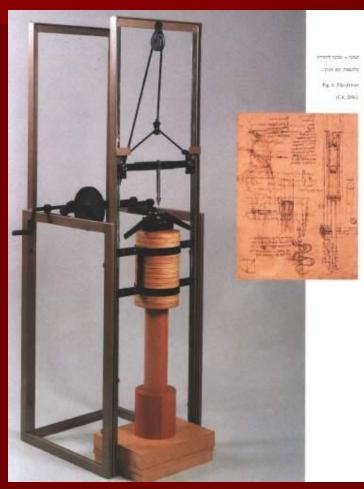
#### Daniel & Matilde Recanati Center

- Established in 1984
- Housed in an historic landmark building, originally home to the Technion Israel Institute of Technology, Israel's first institution of higher education
- The Museum's array of 550 permanent exhibits, mostly interactive
- About 500,000 visitors of all ages, backgrounds and geographic locations, take part in Museum activities annually
- Historic Collection, of scientific instruments and equipment, has led the Israeli Government to designate the Museum, the country's
  - National Archive of Scientific Instruments



Albert Einstein Touring the Historic Technion Workshop Building (1923)

# Leonardo da Vinci Scientist and Engineer

















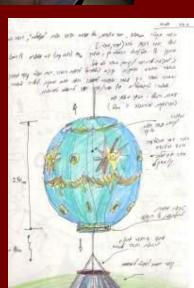
## Flight Exhibition

1904 – 2004, 100 Years of Aviation







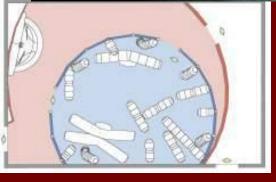


## The Secrets of Life

The World of D.N.A

© www.mustsee.brg.i







# Magical Science





Visual Deceptions Hall



## **Green Energy Exhibition**









# Patagonia Gainets









### Scientific Center as a National Museum



Albert Einstein's teaching aids (tellurium, solar system model and telescope)







Imagine – Ilan Ramon Israel's First Astronaut

# Expanding – Science Garder



# **Educational & Visitors Programs**



## **Outreach Activities**

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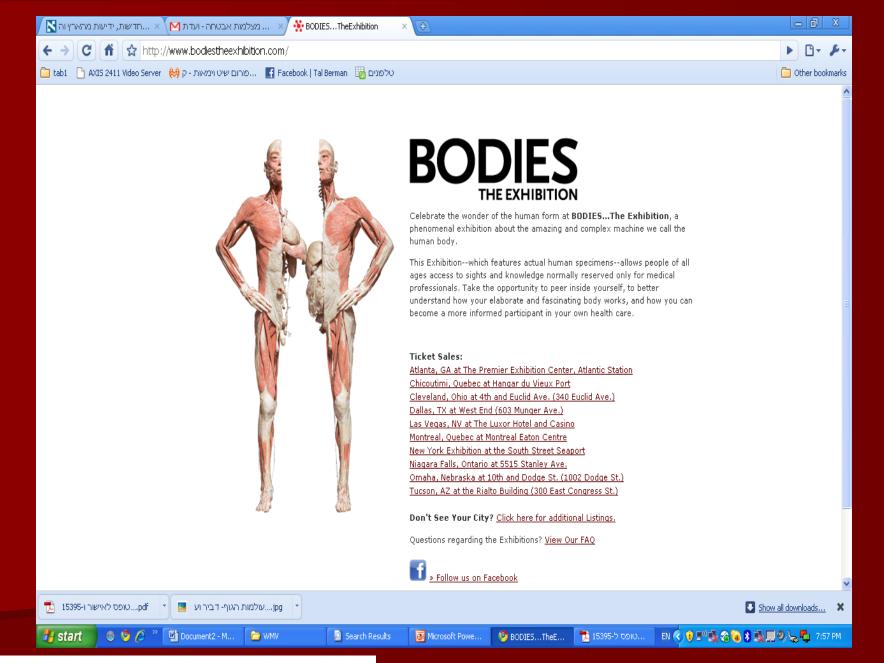




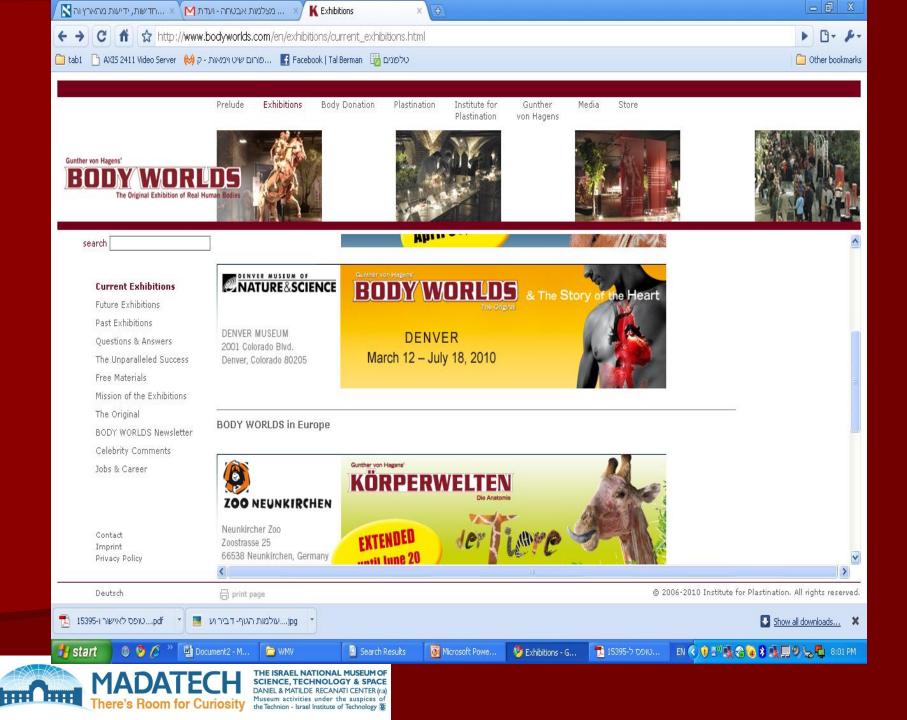
# **Bodies or Body Worlds?**











# **BODY WORLD** in ISRAEL





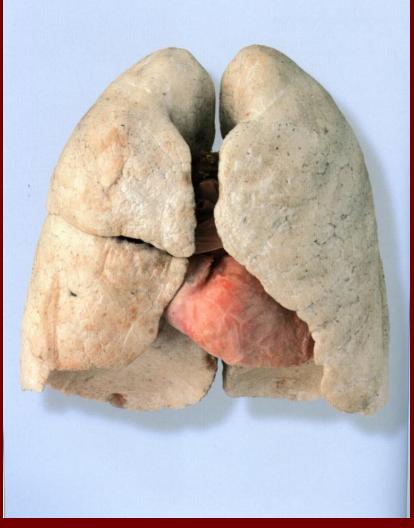
THE ISRAEL NATIONAL MUSEUM OF SCIENCE, TECHNOLOGY & SPACE DANIEL & MATILDE RECANATI CENTER (r.a.) Museum activities under the auspices of the Technion - Israel Institute of Technology

## **Ethical Issues**

- Public exhibition of authentic human anatomical specimens would violate the dignity of the individual, and more precisely that of the deceased
- Religion feeling
- Is this the right thing to do? Using human bodies in order to make money?
- Science show or peep show

# Health, improve your life style Smoker vs. Non-Smoker





# **Making Coalition**























THE ISRAEL NATIONAL MUSEUM OF SCIENCE, TECHNOLOGY & SPACE DANIEL & MATILDE RECANATI CENTER (r.a) Museum activities under the auspices of the Technion - Israel Institute of Technology (%)

# **Open the Doors for Criticism**





All explainers are medical students

- Was it a success?
- Way was it a success?
  - Braking a taboo
  - Education
  - Reality
  - Curiosity

**Edutainment = Education + Entertainment** 

# What is the Museums Role in Displaying Human Anatomical Specimens

## **Democratization of the anatomy**

# **Summery**

Edutainment = Education + Entertainment

500 Years of Science Communication