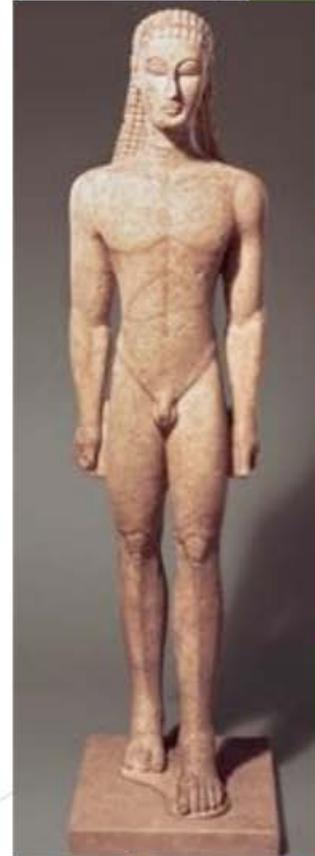


# Forming a Classical Ideal: The Development of Greek Statuary

- ▶ This Archaic Greek statue is a **kouros** (the female version is a **kore**)
- ▶ Egyptian-like pose but suggests motion (note his feet)
- ▶ His muscularity communicates a nude heroic type
  - ▶ Think about what the statue communicates about what characteristics were valued in Ancient Greek culture
    - ▶ Youth, strength, muscularity, the well-formed body
- ▶ The addition of a smile is added to make the statue seem more lifelike
- ▶ This famous **kouros** on the right is in Metropolitan Museum of Art on 81<sup>st</sup> St and Fifth Ave
- ▶ The **kouros** was probably used as a grave marker
- ▶ Watch a video here about the New York Kouros: <http://bit.ly/VmSldy>

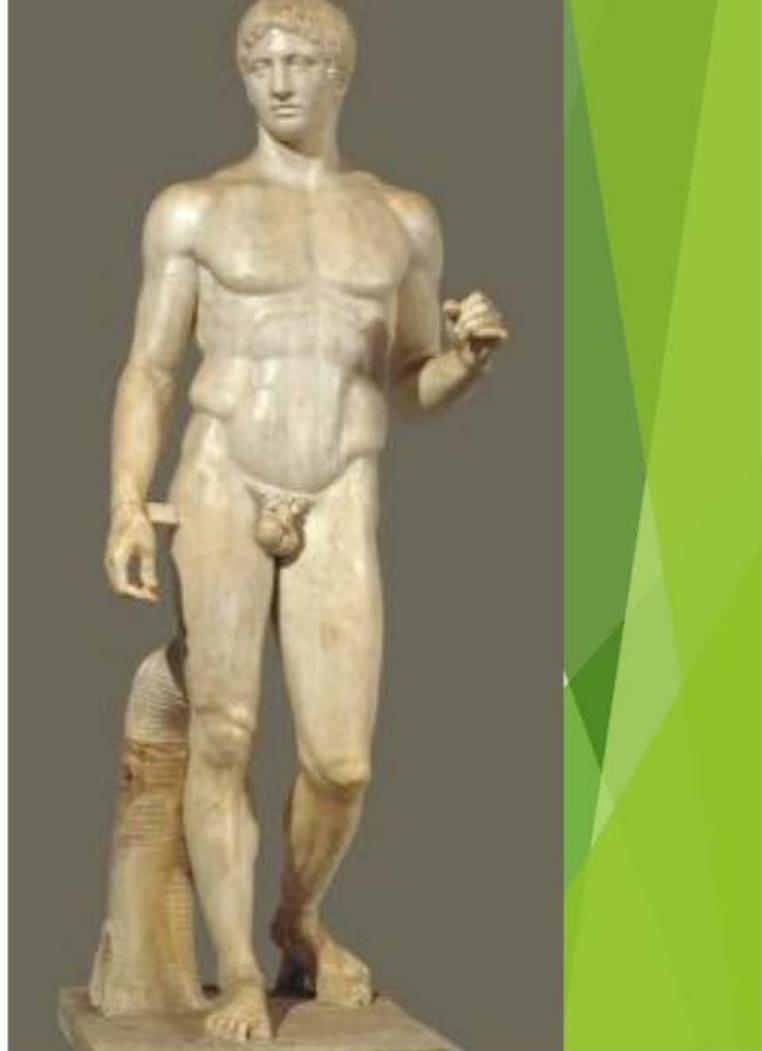
Kouros, c. 600 BCE



# The Classical Ideal in Greek Art

- ▶ Marble copy of **hollow-cast bronze** sculpture
- ▶ **Contrapposto** with ordered human motion
- ▶ Asymmetrical balance
- ▶ **Canon** of proportion
- ▶ Watch a short video about Polykleitos' **Canon** here:  
<http://bit.ly/1BsJZZl>

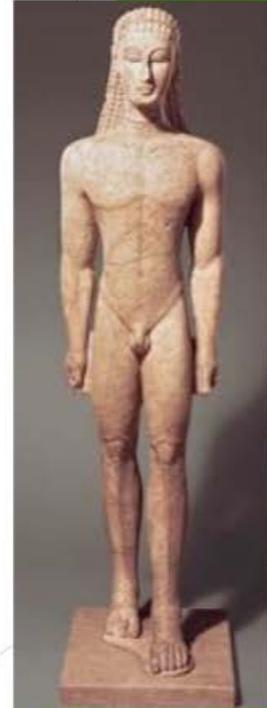
Polykleitos, Doryphoros, ca. 450-440BCE



# What is Contrapposto?

**Contrapposto:** It is a position or stance that represents a more natural form of the body. The position of a person when the weight is on one leg while the other remains bent and relaxed.

**Exercise:** Stand up and be attentive to how you stand. Do people usually stand more like the Kouros? Or more like Polykleitos' Doryphoros?

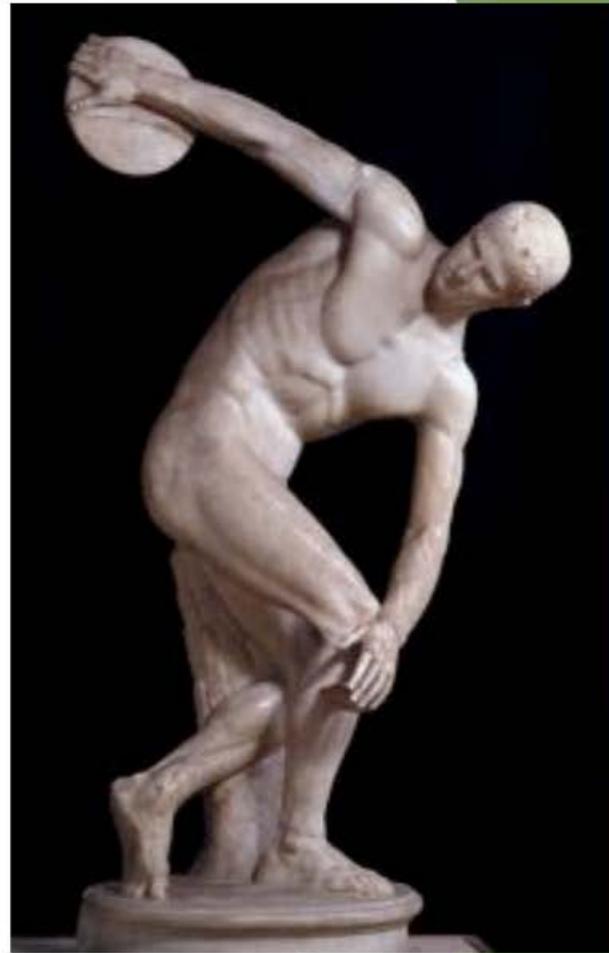


According to tradition, the Olympics began in 776 BCE. The games were brutal spectacles with few rules and strong emphasis on proving the athlete's masculinity. Women were not allowed to watch (on penalty of death!)

The pentathlon was the event from which the modern Olympics derives many of its events, including discus throwing, javelin, long jump, running and wrestling. Aristotle wrote, "a body capable of enduring all efforts, either of the racecourse or of bodily strength... This is why the athletes in the pentathlon are most beautiful."

Watch a video about the *Diskobolos*:

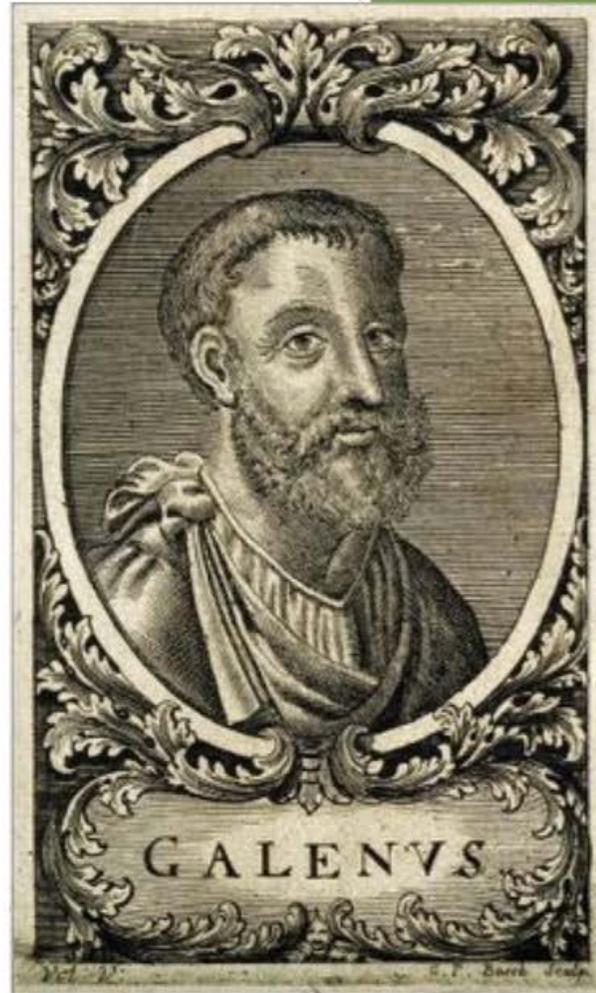
<http://bit.ly/2kFNgSp>



Myron, *Diskobolos (Discus Thrower)*, c. 450 BCE

## Galen and the Study of the Body

- ▶ Galen (131-c.201 CE), a Greek philosopher and surgeon born under Roman rule.
- ▶ Added to Hippocrates (460-375 BCE) humoral theory by connecting the four humours to elements and seasons.
- ▶ At 19, he went to the city of Alexandria, where he studied books about dissections performed in earlier times. This practice was taboo under Roman rule.
- ▶ Although dissection was not allowed, Alexandrians permitted the study of human remains.
- ▶ Through observation, Galen learned how the body worked.



# Galen, Sports Medicine, and the Squealing Pig

- ▶ Galen received practical experience as a sports doctor, allowing him to study bodies in top physical shape
- ▶ He treated athletics participating in Greek Olympic games and Roman gladiators
- ▶ Known for improving surgical procedures to treat gladiatorial wounds (i.e., stitching tendons together), Galen was called to Rome to treat gladiators who fought in the Colosseum
- ▶ Because dissecting bodies remained taboo, Galen performed experiments on animals, including the famous squealing pig demonstrations where Galen severed the vocal chords of a strapped pig that would continue to struggle in silence. The experiments led to the knowledge that the brain is the most important organ in the human body.
- ▶ Galen was personal physician to Emperor Marcus Aurelius and his son Commodus. Remember the gladiator-obsessed Emperor in Ridley Scott's *Gladiator* (2000)? He was Commodus.



Galen's Squealing Pig experiment

# Watch the “Beauty and Anatomy Episode I: Galen and Leonardo”

- ▶ The Greek classical ideal in art continues into Roman times but becomes less important during the middle ages
- ▶ Interest in the classical ideal figure is revived during the Renaissance, which is evident in the art of Leonardo and Michelangelo
  - ▶ Notice how Michelangelo’s David is sculpted in dialogue with ancient Greek sculpture
- ▶ As you watch this video, note that Galen’s study of the body comes at a time when art is dominated by classical traditions of the ideal body
- ▶ Follow this link to the video:  
<http://bit.ly/2kSwJWo>



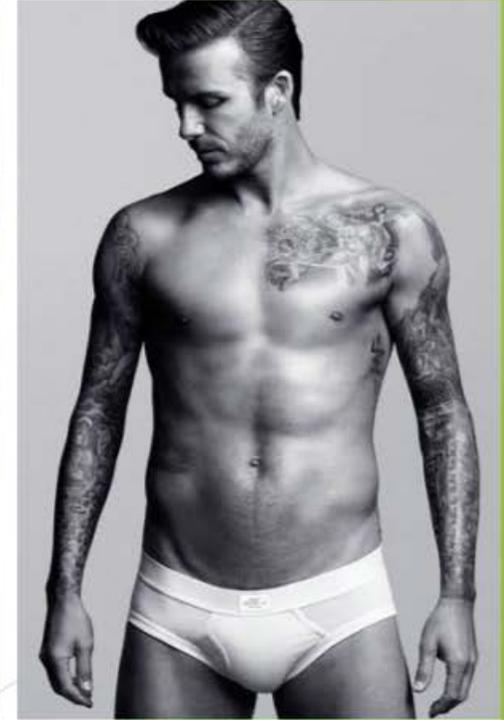
Michelangelo, *David*, 1501-04



Polykleitos, *Doryphoros*,  
ca. 450-440 BCE

# The Classical Ideal Today

- ▶ In this comparison of Michelangelo's David to a H&M Ad featuring a former soccer star, we see the tradition of the classical ideal continues even today. The characteristics of muscularity, youth, and proportional balance function as graphic short hand to illustrate idealized masculinity.



# Leonardo da Vinci's anatomical studies

- ▶ The artist Leonardo performed most of his anatomical studies in Florence, where he conducted many dissections in the crypt of the hospital-church complex of Santa Maria Nuova.
  - ▶ Leonardo also performed dissections on animals
  - ▶ There is a prevalent misconception that the church banned dissections, but after you read the Katherine Park article, you will realize this is not true.
- ▶ The largest collection of Leonardo's anatomical sheets belongs to the British monarchy and is located in the Royal collection at Windsor Castle outside London.
- ▶ Watch a short video on these studies: <http://bit.ly/2lFRYiL>
- ▶ Website for a recent exhibit of the Leonardo's anatomical drawings: <http://bit.ly/2m2pJv2>

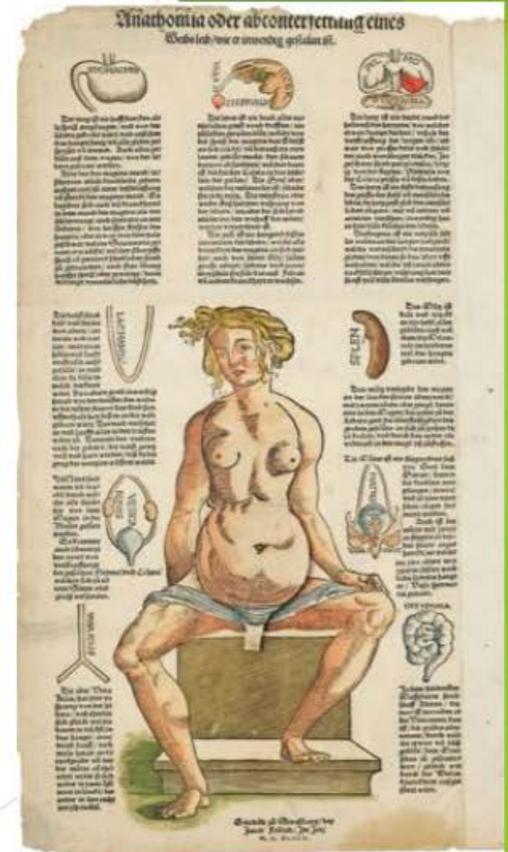


Leonardo da Vinci, *Embryo in the Womb*, c. 1510

# Anatomical Study Pre-Vesalius

- ▶ Prior to Andreas Vesalius' breakthrough anatomical treatise, the study of the body remained based on Galen's writings
- ▶ Prints called anatomical flap prints or anatomical fugitive sheets were produced to illustrate parts of the body
  - ▶ Sheets combined text and illustrations
  - ▶ Prints had hinged flaps that could be lifted to reveal internal structures or organs
- ▶ Watch a short video of an example in the Harvard Art Museums: <https://vimeo.com/31790483>

Example of German anatomical fugitive sheet by Heinrich Vogtherr, c. 1538



# Andreas Vesalius, *De Humani Corporis Fabrica* 1543 (*On the Fabric of the Human Body*)



- ▶ Produced by Vesalius when he was a 28-year-old professor at the University of Padua
- ▶ Surpassing Galen's discoveries, Vesalius produced a study of the body based on his own study of dissections
- ▶ 600 pages of text
- ▶ Engravings by students from the painter Titian's workshop
- ▶ Read Katherine Park's "Criminal and Sainly Body" and note on page 18 the unorthodox ways that Vesalius and his students acquired bodies for dissection
- ▶ Park's article is located under 'Readings' on our Blackboard website

# Impact of Vesalius on Medical Practice

- ▶ Park's article gives you the context for the practice of dissection leading up to Vesalius
- ▶ After Vesalius' publication, dissections become more common in major urban areas and university towns
- ▶ The dissection becomes a spectacle (note audience in the title page illustration) and is made available to the interested public
- ▶ Dissections are usually performed around Carnival (January and February-note Fat Tuesday/Mardi Gras is in a few weeks!) because it is the coldest time of year
- ▶ As noted in the author portrait, Vesalius himself performs dissections. Prior to this, the doctor lectured and pointed to where cuts should be made, never touching the actual body
- ▶ Watch a short video about the transition from Galen to Vesalius in the study of the body:  
<https://www.youtube.com/watch?v=ZhnDcPdS4NA>



Title page and author portrait, Andreas Vesalius, *De humani corporis fabrica libri septem* (Basel, 1543)

# The Impact of Anatomical Study on the Arts

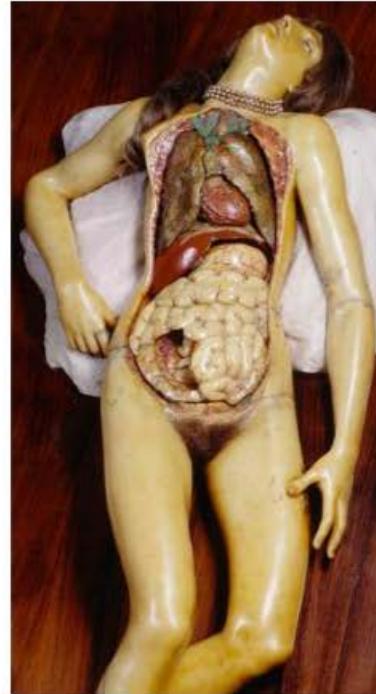
- ▶ As people increasingly turn to the study of the internal body, the rendering of figures becomes more naturalistic in the Renaissance and especially in the Baroque period (c.158–1700)
- ▶ Rembrandt's *Anatomy Lesson of Dr. Tulp* demonstrates the highly naturalistic portrait of a doctor with his students for a highly innovative group portrait
- ▶ Watch a short video on this painting here: <http://bit.ly/2kT0d6M>



Rembrandt, *Anatomy Lesson of Dr. Tulp*, 1632

# The Impact of Art on Medical Study

- ▶ La Specola in Florence has the world's largest collection of wax models
- ▶ Italian wax model sculptors were famous for producing anatomical models for medical study
- ▶ Clemente Susini (1757-1814) was known for creating intricate and highly detailed sculpted models out of colored wax
- ▶ Wax models provided an alternative to dissections
- ▶ Watch a short travel segment about this collection here: <https://youtu.be/Bo8uRH6mpOc>



Clemente Susini, *Wax Venus*, 18<sup>th</sup> century



Clemente Susini, *Eye apparatus*, 18<sup>th</sup> century

# Future of Medical Learning

- ▶ 3D models allow students to get a sense of depth in the study of the human body
- ▶ New virtual reality applications are creating new ways of studying the human body
- ▶ Watch a short video on the collaboration of Microsoft HoloLens with Case Western Reserve Medical School:  
<http://bit.ly/1CsJbEm>

