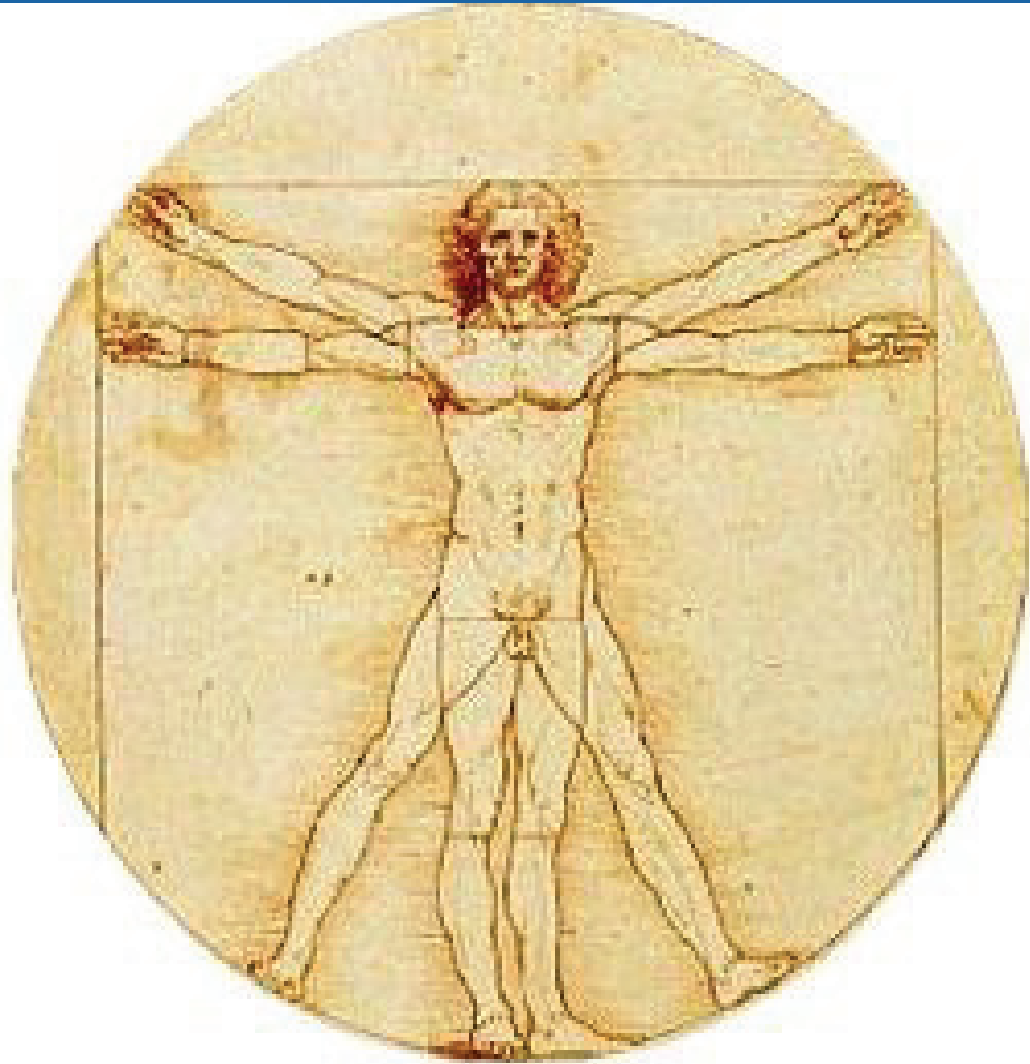


# Students' Attitudes and Responses to Anatomy and Dissection

Anatomy of Anatomy Elective

Johanna Shapiro, Ph.D.



# What the research tells us

- The research is equivocal about the extent to which students are bothered physically or emotionally by anatomy
- Several older studies report serious psychological distress in anatomy students
- More recent studies, however, indicate that anatomy is only moderately, or not very, stressful, and in fact generates considerable enthusiasm and excitement among the large majority of students
- A similar study indicated that students generally do not find cadaver dissection aversive, but rather see it as “a positive and challenging life event”
- To some extent, anatomy appears to be a self-correcting experience from a stress perspective, in that student stress “naturally” appears to attenuate as the course progresses
- Whether or not anatomy is stressful for students, there is evidence that learning how to manage emotions that arise during anatomy may improve test performance



# Emotional risks of anatomy

- Anatomy lab can be the beginning of a physician's training in how to isolate and restrict affect
- Or how to deal appropriately with affective responses
- Unfortunately, an unintended consequence of human dissection is that it may create in medical students an inappropriate and callous "property of easiness" in dealing with death and the human body



# Opportunities in anatomy

- The gross anatomy course is frequently regarded as the first rite of passage for medical students
- Anatomy is the students' first formal opportunity to
  - bear witness to another's suffering (in this case, the “suffering” of the cadaver)
  - as well as their own suffering as a result of participation in the anatomy lab and the dissection process





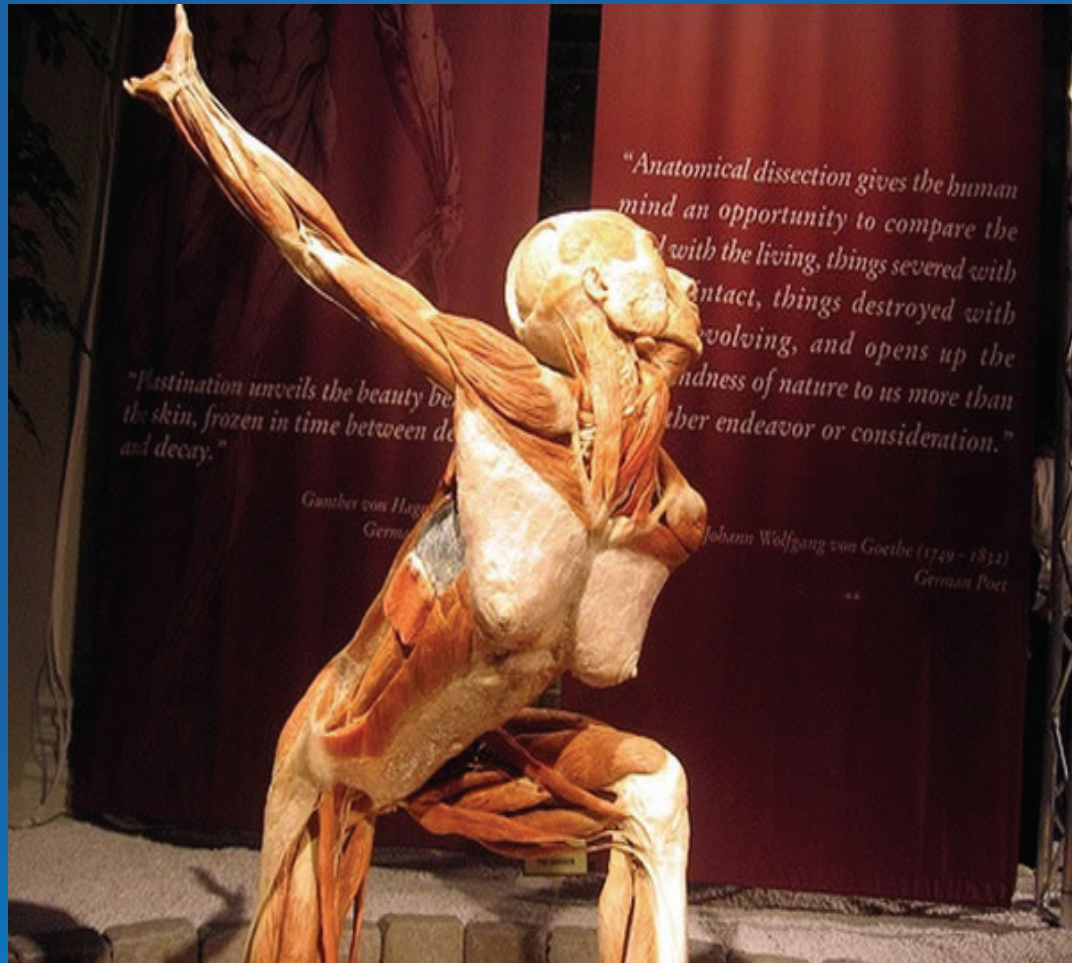
# Gratitude

- Most common emotions experienced by students toward the cadaver are gratitude/thankfulness
- Students often marvel that people are willing to donate their bodies for dissection purposes
- Feel great appreciation for this opportunity of hands-on learning
- Dissection is viewed as a great gift; students are in awe of the almost unimaginable sacrifice the donor has made
- Frequently leads to a sense of obligation/responsibility
  - Student assumes commitment to apply knowledge acquired to heal the living



# Awe and Wonder

- Other common emotions: awe and wonder
- Miracle (sacredness) of human body
- Intricacy and complexity of body
  - Awe-inspiring map that guides students in an amazing exploration
- Privilege of knowing other bodies in a way that ordinary people do not
  - Students describe the knowledge they gain of specific nerves, organs, and structures as “intimate” and “special”



"Fastination unveils the beauty beneath the skin, frozen in time between death and decay."

Gambler von Hagen  
German

"Anatomical dissection gives the human mind an opportunity to compare the dead with the living, things severed with things in contact, things destroyed with things surviving, and opens up the mystery of nature to us more than any other endeavor or consideration."

Johann Wolfgang von Goethe (1749 - 1832)  
German Poet

# Violation Requiring Forgiveness

- Sometimes students experience dissection as horrifying, even sacrilegious
- Dissection is seen as brutal, mutilating
- Sense of committing a violation; student feels part of something ugly and inhumane
- A feeling of “wrongness” in dissection
- A sin, for which the student needs forgiveness



# Separation/Detachment from Emotions

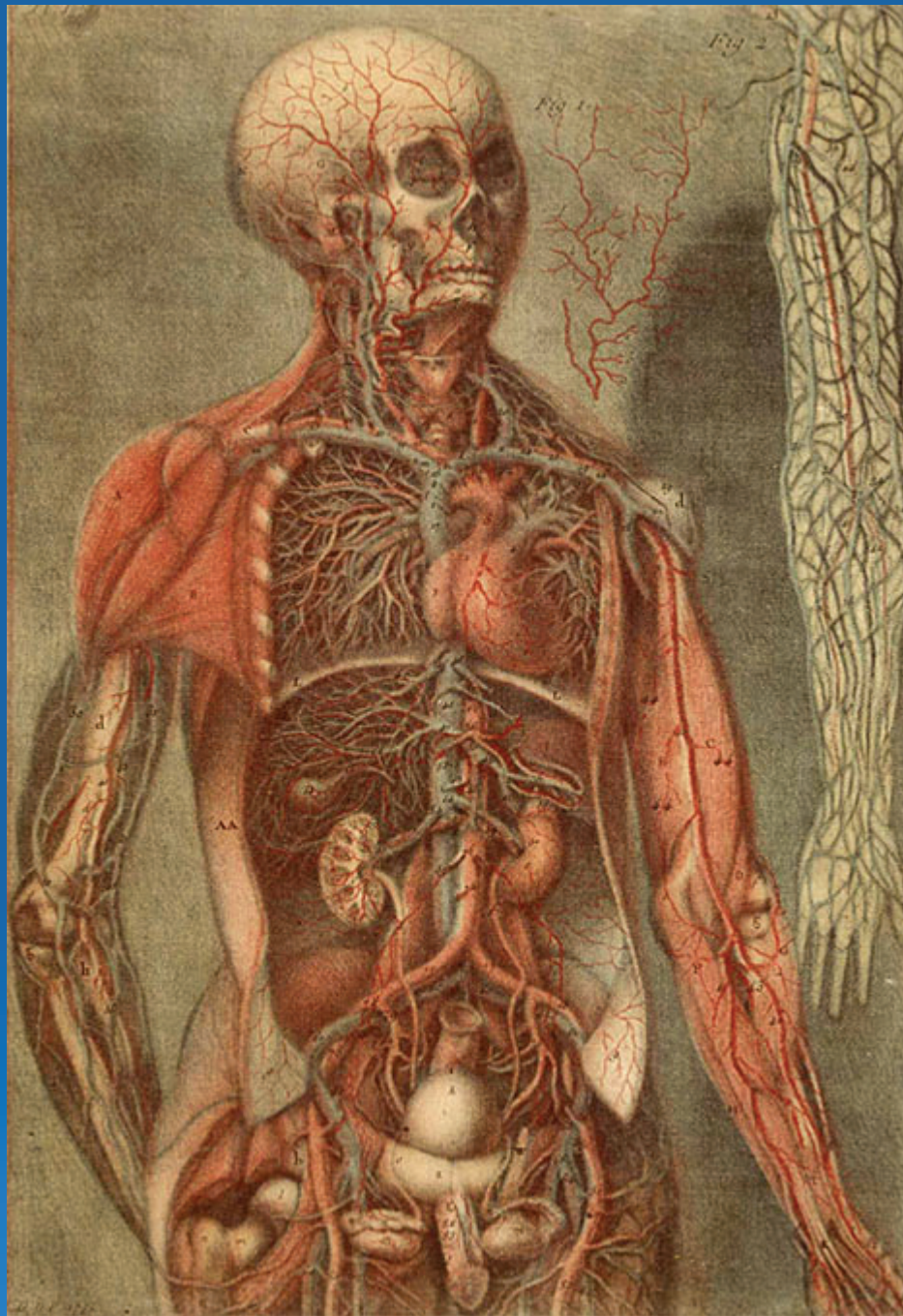
- Sometimes students try to cope with the troubling aspects of anatomy by detaching from their emotions
- Detachment conforms to prevalent views of medicine that draw a clear distinction between doctor and patient, student and cadaver
- Detachment ultimately results in students feeling disillusioned with medicine and disappointed in themselves





# Reflecting on Life and Death

- Some students are moved by their experience in gross anatomy to reflect on “ultimate” questions
- Think about their religious and spiritual beliefs
- Think about the meaning of life and death



# There are no “right” feelings in response to dissection

- Extreme responses may be cause for concern
  - Difficulty eating
  - Recurrent nightmares
  - Persistent feelings of guilt
  - Inability to go to lab
- There is a large range of emotional responses to anatomy and dissection that are reasonable, appropriate, and “normal”
- Feelings often evolve and change at different points in the course



# Opportunity to Develop Attitudes of Professionalism

- Respect for the human body
- Treating patients with empathy, compassion, and dignity
- Leadership and teamwork
- Remaining connected with others outside medicine
- Reflection on own emotional reactions to clinical situations
  - How to deal with challenging situations

