Biol4270 – History of Biology **Eakin's "*Great Scientists Speak Again*"**

William Harvey (1578 - 1657)

William Harvey (1578 - 1657) completed a four-year bachelor's degree at 19.
How has the education system changed in the last 400 years? How has it stayed the same? - 1:17

What could be learn about internal anatomy by dissecting and comparing many different vertebrates? Would vivisection of living animals (fish in this case) be allowed today? = 2:47

Some of Galen's 1st century CE descriptions of blood flow, such as the mixing blood and air, are in part accurate. Given the resources of his time, were his conclusions about blood flow reasonable? - 3:25

Why would Harvey's views on the circulation of blood be considered **heretical**? -5:03

What legislation forced Harvey to work on human bodies in secret? Why were these rules in place? – 5:30

Compare the models of Galen *versus* Harvey on the circulation of blood. – 7:30

Think about how Dr. Harvey determined the path of blood flow. Are these methods scientifically sound? Are they ethical by todays standards? – 12:43

Why might physicians continue to believe for centuries that the septum of the heart has pores, despite no evidence of their existence? – 16:53

Are Harvey's calculations for the rate of blood flow accurate? What important realization does he make from his calculations? -20:35

Explain how the experiment in which Harvey cuts arteries and veins in a limb shows that blood circulates in only one direction? - 23:20

Compare Harvey's demonstration to show blood circulation with what is done today in medicine (measuring blood pressure, finding veins for needles, etc.)? - 25:30

Harvey was Richard Eakin's favorite scientist. Eaking as Harvey highlights the importance of **learning through experimentation and observation**. How can a balance between listening to what others say and trusting your own senses be maintained? - 28:09

See:
William Harvey (1628). *De Motu Cordis ….* [On the Motion of Heart and Blood in Animals]