Throughout the Medieval and early modern periods, European academic medicine was largely reliant upon classical Greek and Roman texts discussing ancient hypotheses on the body and how best to cure its ailments. This went especially for those who studied gross (visible to the eye) anatomy, as academic anatomical dissection was rarely practiced in Europe due to lasting stigmas left over from the Roman Empire (on account of their superstitions and legal protections surrounding cadavers). Because of this, scholars relied upon ancient texts predominantly written by the Greek physician Hippocrates and the Roman physician Galen in order to get a better understanding of the human body. Ironically, neither Hippocrates or Galen had any great access to human dissection, respectively living prior to and after the Alexandrian period during which dissection was a more common (and less stigmatized) practice. As a result of this, academic European anatomy was largely based off of educated guesses, animal organs, and straight-up falsehoods up until the re-emergence of common-place human dissection in the 14th and 15th centuries. With this came an influx of new medical and anatomical discoveries and techniques, many of which were discordant with the information taught by Hippocrates and Galen. In particular, modern anatomical dissection harshly refuted ancient ideas on human genitalia.

Galen had theorized that all human sex-organs were fundamentally the same, only placed in different orientations depending on the person’s sex (male, female, or intersex). To briefly explain, Galen believed the penis and vaginal canal were the same organ, with the penis being its external orientation and the vagina being its inversion. Testicles and ovaries were also considered the same organ, again in external and internal form. Galen attributed this ‘one-sex model’ to the Greek doctrine of the humours and his own variation of that system wherein the human body was comprised of different temperaments. Basically, if a body contained the proper amount of innate heat, the genitalia would expel themselves from the body during conception and create a male human. If a body contained a lack of this innate heat, the genitalia would remain inside the body and create a human female. Intersex variations of human genitalia were considered to be the result of certain masculine and feminine procreational elements mixing, creating what texts of the day referred to as a monstrous child. My interest and the focus of my research was to see the interactions between this one-sex model and the new model of sexual dimorphism birthed from Europe’s resumption of anatomical human dissection.

I focused specifically on this interaction as it occurred in early modern England (approximately the 15th to 17th centuries) so I would be able to access primary sources from medical texts at the time. I found that sexual dimorphism as a concept was generally well-accepted among English academics, who promptly dropped the one-sex model as better evidence arrived. What was most interesting about my research, however, was that the other systems of human sex remained along with the new development of sexual dimorphism. There was little challenge posed by physicians to ideas such as the doctrine of the humours and the four temperaments, despite their proposed relationship to human sex and genitalia requiring some form of a one-sex model to make sense. Instead of reviewing the anatomical and biological implications of sexual dimorphism, English physicians tended to merge the new anatomical system with the old biological system. There was little concern over how (or if) the doctrine of the humours or temperamental theory was affected by sexual dimorphism, and those systems would remain in place long after the rejection of the one-sex model. I am incredibly grateful for the opportunity afforded to me with this research internship and would like to thank everyone involved in the process, especially my supervisor Professor Johannes Wolfart without whom my research would be nowhere near what it is.