

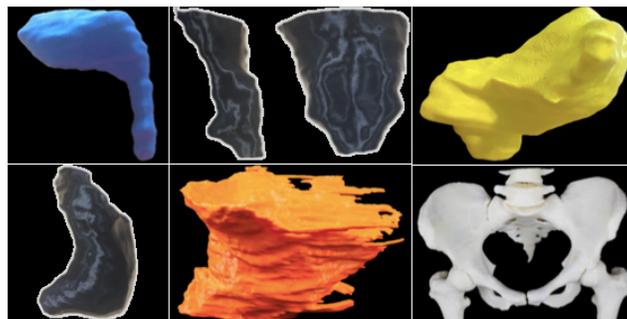
October 11, 2018

Dear Parent/Guardian,

My name is Deanna Easley, and I am a Ph.D. graduate student researcher from the University of Pittsburgh. My research focuses on understanding effective ways of helping high school students comprehend and retain information about the basic structure and function of female pelvic anatomy. This letter provides background for the study, learning objectives, and the specific procedures that will take place.

**Background:**

Previous research studies and current social media groups have demonstrated that adult men and women have significant gaps in comprehending and retaining information about female pelvic anatomy and function. This gap in knowledge may seem insignificant, however, over 50% of women experience some level of pelvic floor dysfunction (i.e. incontinence, prolapse) during their lifetime, and much of the stigma that surrounds these pelvic floor disorders is rooted in the gap in knowledge that developed decades prior. Interestingly, research reports that 1/3 of adults in the US received their education regarding female pelvic anatomy during high school. Therefore, we propose a study to investigate the ability for high school students to comprehend and retain information pertaining to female pelvic anatomy when exposed to either lecture or 3D pelvic models (examples shown below), to determine if there are cost-effective and retention-effective ways to expose students to female anatomy. We believe this research is impactful by addressing the stigma associated with understanding and discussing female pelvic health, helps educate the general public (i.e. future generations) about female pelvic health and concerns, all while highlighting the importance of female pelvic health research.



Examples of 3D printed organs that will be studied

## Learning Objectives:

Students will be able to:

- Identify and label the names female pelvic organs/genitals based on relative location and structure
- Match organ names with their respective functions
- Identify risk factors for pelvic floor disorders
- Identify pelvic floor disorders based on described scenarios and predict how compromised pelvic support can affect function
- Explain challenges with assessing and diagnosing pelvic floor disorders

## Research Procedures:

- Students will be assigned a 4-digit code by their teacher that will be used to match pre- and post-assessment responses
- Students will take a pre-assessment to gage their baseline knowledge regarding female pelvic anatomy. They will be asked to provide demographic information such as gender and GPA in order to help us conduct statistical tests based on characterization of the general population.
- Students will be randomly broken into 2 groups:
  - Lecture Only group
  - 3D Pelvic Model Group
- Students will be taught using one of the 2 teaching styles shown above for 45 minutes -1 hour
- Students will be given a post-assessment following all activities to gage comprehension of material
- Two weeks later, students will be given another post assessment to gage the retention of the material
- The researchers will observe class sessions but will not record information about individual students
- Results from all assessments will be provided to the researchers for comparisons between groups
- Results from this research may also be shared with others researchers conducting similar or related research studies, however, because no identifying information is collected, all results will continue to remain anonymous and untraceable to the students.

**No identifying information (i.e. name, birthday, etc.) will be collected and used for research purposes.** There are no payments/compensations provided for participation in this research study.

Your child's participation is completely voluntary, and they can discontinue participation at any time. There are no foreseeable risks associated with this research study. **Individual student responses are confidential.** All research results published from this study will be done without student/school identifiers. Questions regarding the research study can be answered by Ms. Deanna Easley via email at [dce14@pitt.edu](mailto:dce14@pitt.edu).

---

PERMISSION SLIP: Please return to your classroom teacher by **October 22, 2018**.

I, \_\_\_\_\_ give my child \_\_\_\_\_  
permission to participate in this research study.

I, \_\_\_\_\_ DO NOT give my child \_\_\_\_\_  
Permission to participate in this research study.

Date \_\_\_\_\_