How One Donor Affects Thousands of Patients: An interprofessional exploration of anatomy, pathology, and one human story

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setting
Quinnipiac University welcomed its first medical school class in 2013. A 12,000 square foot anatomy lab was constructed on the new graduate campus in North Haven, CT. The presence of a new anatomy lab on campus allows all QU students to stay on site.

Prior to the opening of the Frank H. Netter MD School of Medicine, students in the School of Health Sciences took dissection-based anatomy at nearby Yale University. The new lab also provided new opportunities for students in other disciplines to visit the anatomy lab.

In 2015, the Doctorate of Nurse Practice (DNP) program created a new anatomy lab on campus. The new lab also provided new opportunities for students in other disciplines to visit the anatomy lab. The new lab also provided new opportunities for students in other disciplines to visit the anatomy lab.

her story
CL was a 54-year-old white woman who died in August 2017. Her next of kin, a first cousin, contacted the Quinnipiac Body Donation Program, in which CL had expressed the desire to participate. The directors of the program considered refusing the donation, as she nearly met the program’s exclusionary criteria for obesity and her cousin had just had metastatic cancer of some kind. The directors decided to accept the donation, but rather than have novice students perform the Pathology noted:

- Dozens of metastatic lung lesions, one of which were reported an enlarged hypophyseal fossa.
- Frozen section of lung lesions subternal neural invasion (performed by MFS).
- Death certificate noted “uterine sarcoma” as COD and her occupation as “pottery studio.”

Anatomist at the medical school (LC) prospects one donor cadaver each year and the DNP and CRNA students visit for nine 30-minute anatomy sessions over the course of their two-Semester “Advanced Health Assessment” class.

20 DNP students came to learn “normal” anatomy & get much more. They needed patient findings to contextualize patients they had based. They brought up “better’s cough,” which they had explained CL’s apparent daily if missing treatment.

Diagnostic imaging students and faculty brought portable x-ray to the lab to locate bony lesions. A radiologist reviewed the images and reported an enlarged hypophyseal fossa.

Four fourth year medical students completed an elective pathology rotation, working with the PA to prepare a slide of the donor’s lungs and uterus and guided other students through the case.

10 CRNA students had taken a dissection-based anatomy course focused on PNS and airway previously. One had this to say about the dissection experience, “We felt the high quality of instruction & confidence in the anatomy by the faculty brought portable equipment to the lab to look at various organs and tissues. One said, “I enjoyed following where the clues led, as I would have in a patient's case.”

Pathologist MFS at double-headed microscope with an M4 reviewing slides.

One Pathology Assistant student took the lead on exploring the enlarged hypophyseal fossa detected in the x-ray. She described her experience: “I enjoyed following where the clues led, as I would have in a patient's case.”

Ideas for moving forward
Body donation programs consider relaxing some of their criteria for donation – this “ideal donor” model included an unmatched learning opportunity for students. Wherever possible, students can investigate a case together, even asynchronously, and learn from each other.

All donors have a story – collaborations between those dissecting and Pathology and other health professionals are crucial. Pathology, radiology, and pathophysiology are the primary professions.

Near-peer teaching (i.e., M4s teaching M2s) can be an effective and motivating model to improve learning for all participants, and we plan to seek out additional opportunities to encourage such interactions.

Previous clinical experience, such as that of the DNP students, provides invaluable insight into the lives and experiences of living patients. Nurses see the anatomy underlying the their patients’ conditions have and help less experienced students broaden their perspectives on clinical medicine.

acknowledgments
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barriers
Pathology & DI equipment housed far from anatomy lab (fixed!)

Conflicting schedules preclude real-time IP collaboration

Who pays donor fees and faculty time when dealing with a shared resource like this? Incentivizing student & faculty participation

Faculty time spent teaching outside own school counts less toward promotion. We cannot predict what conditions future donors will have, replicating this experience may be impossible.

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