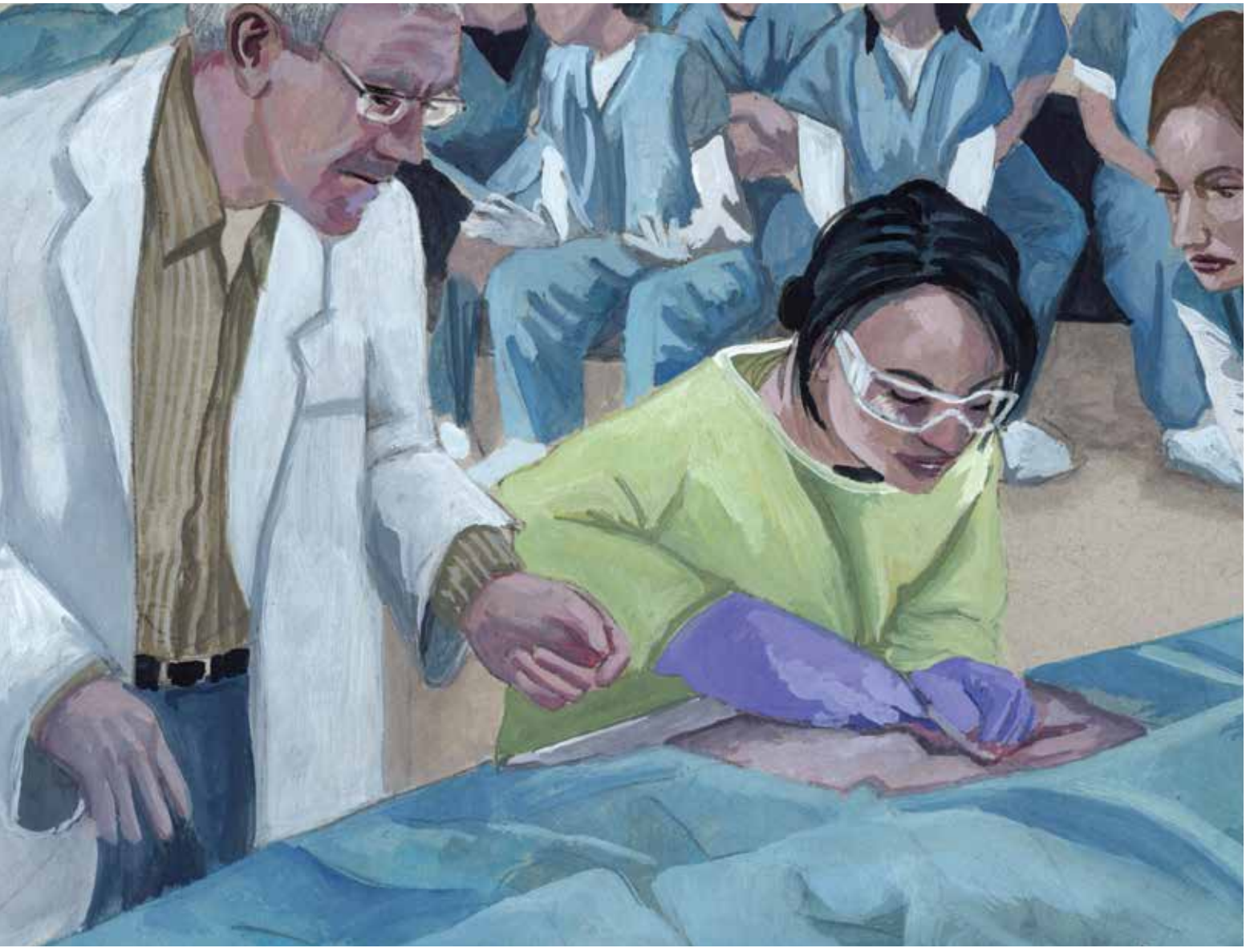
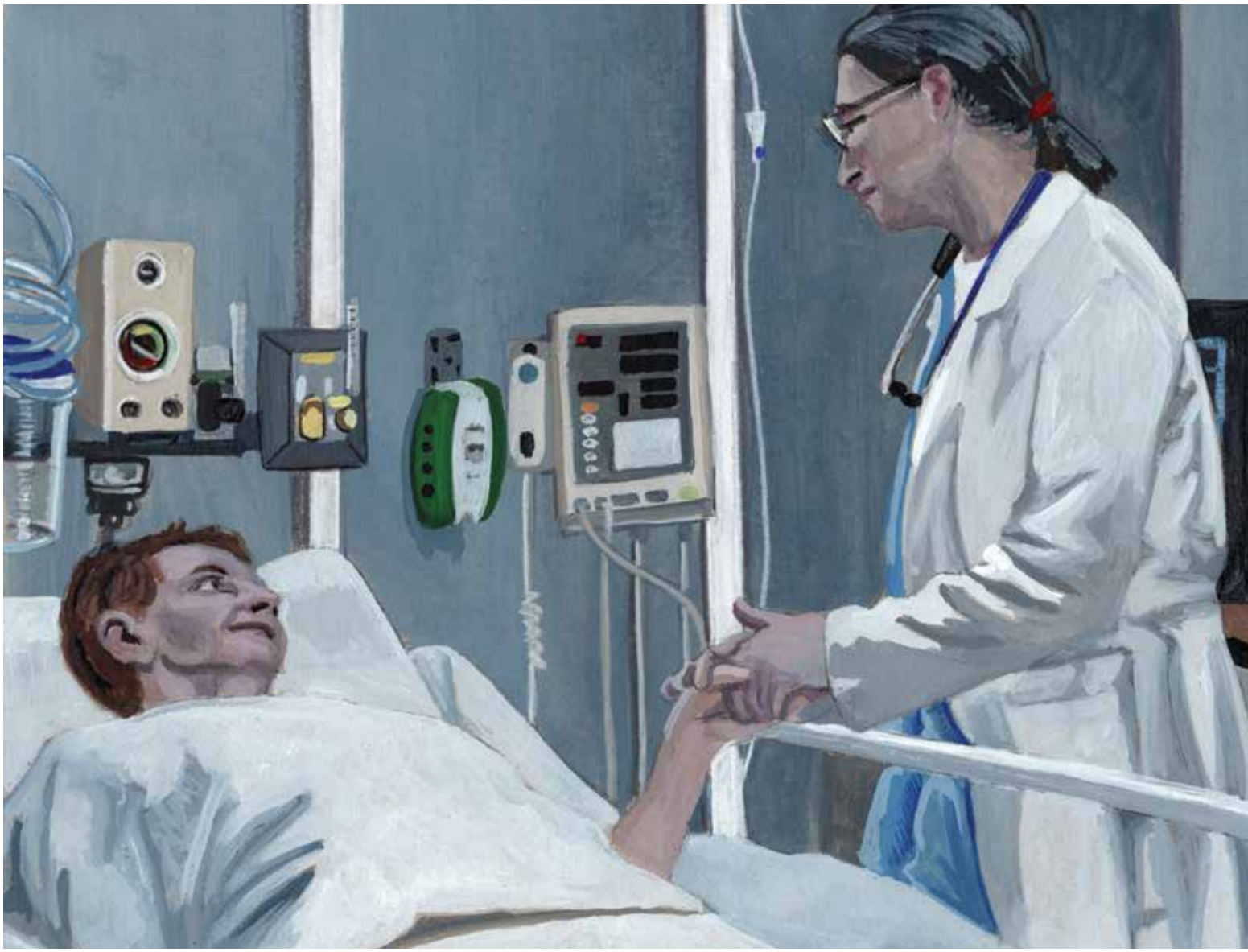
Patient-centered care



begins with the cadaver



Illustrations by Steve Derrick

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It was my third day of medical school. As I glanced at the schedule, I saw that we were due to dissect in the Gross Anatomy Lab that afternoon. I did not feel ready. Without even an introduction to the area this was it—a three-hour lab. My reaction was visceral: I had clammy palms and a heaviness to my body.

I was nervous about touching and dissecting a dead body. However, I knew this was an essential medical school experience, and one that I was privileged to have.

Once my classmates and I were dressed in lab coats, glasses, and gloves, we were ushered into the large, vacuous room and directed to gather around a table. It was such a strange and foreign setting—one big white-walled room, with the smell of formalin, phenol, and other preservatives, and more than 50 body bags neatly placed on cold metal tables.

With a small step, whether forward or back, I was trapped between bodies—be it my fellow classmates or the cadavers. The body bags were color-coded, not in any way that would identify the individual bodies, but rather to reflect the different groupings of students.

In the long lines we formed to enter the room, there seemed to be varied reactions. Tension circulated through the room. Some classmates seemed somber and subdued, others energized and enthusiastic.

When we were asked to open the body bag I hesitantly helped. The cadaver was covered in a damp white cloth. Instructions were given to unveil only the part of the body that we were to dissect. Today was the back. I was proud of myself for being able to assist, even if in a minor way. As we uncovered the cadaver's back, however, a small tear rolled down my cheek.

Seeing a distinct pattern of moles on the cadaver's back, I was reminded that this wasn't just an anatomy specimen, it was once a living person. After a quiet sob, I composed myself, feeling a bit embarrassed to have responded so emotionally when, on the surface, everyone else in my dissection group seemed fine. Fortunately, my group members were very accepting of my reaction and reassured me that it was okay. They told me that I did not need to dissect.

While observing my classmates work, their curiosity and excitement with the cadaver helped to normalize the process and got me interested in the learning. Although I didn't partake in any actual dissection that day, I still felt as though my time in the lab was worthwhile, and that I had gained knowledge by looking and identifying structures.

When I got home, I reflected on my experience. I knew I was uncomfortable with dissection, but what was I to do about that? How was I supposed to respond to the emotions of the day? In talking with my family, some of them physicians, they reminded me that I was doing what the donor wanted. I realized that in order to appropriately

respect the wishes of the person who gave their body, I would need to be hands-on and actively participate in dissection. Someone had given their body in order for me as a medical student to learn anatomy.

On my second lab visit I was much more assertive. I helped lift cutaneous fat to get a clear view of the underlying muscle. It was much less intimidating than I had imagined. Focusing on the donor's desire for me to learn lifted me out of my state of fear. It helped me accept that I was doing the right thing. I felt more confident with the process and the education I was gaining.

I've used both the term cadaver and donor in reference to the same body. The two terms reflect quite different perspectives. Cadaver specifies a detached view of a generic specimen, an anatomical resource—a depersonalized teaching tool. Donor, in contrast, recognizes that this body was once a living soul, a unique individual, who had free will to make personal choices about their body that might benefit others. The word donor brings humanity to the cadaver.

The anatomy professor's commentary

Sarah's initial response to the cadaver was reasonable, natural, and worthy of respect. She comes from a generation that has been privileged to not have witnessed much death, dying, or the bodies of the deceased. Thanks to good health care—i.e., good sanitation, vaccines, sterile surgeries, and antibiotics—many medical students now enter the Gross Anatomy Lab having never seen a dead body. To have reached the age of 20-years-old, without seeing a deceased body would have been unfathomable just a few generations ago.

Sarah's distress is consistent with abruptly confronting a dead body.[1] Whether one is present when someone dies or meets a corpse afterward, one recognizes the absolute loss that comes with the loss of a life. Her tears reflect honest sensitivity about both the donor's end of life and mortality in general (perhaps her own included). That is an unavoidable reality of the Gross Anatomy Laboratory.

Sarah's hesitancy to touch the cadaver or to pierce it with a scalpel reflects a genuine and common cultural taboo against contacting and desecrating a corpse. It would be far more problematic if Sarah had grabbed the scalpel and started cutting indifferent to the fact that that corpse was once a person.

In my years of teaching anatomy, I've come to recognize students' hesitance in dissecting as natural and normal. But I also know that has to be overcome if the students are going to learn the anatomy that is the substrate of medicine.

As Sarah discovered, if she is going to honor the wishes of the donor, she must see how the donor's body is constructed. A patient-centric approach to medicine privileges the patient's wishes.[2-4]

The first patient the medical students meet is a cadaver. And the owner of that body's request to the medical community is that those entering that profession know the inner design of the human body. Honoring that request makes the student's encounter with the cadaver profoundly patient-centric, as paradoxical as that might sound. This wasn't just a cadaver; this was a donor's body. That is true regardless of the fact that the patient's desire can only be met after the patient has died. To be clear, the donor of the cadaver, is not a patient being treated by the medical student. But, this is a chance for the medical student to learn to respect the wishes of patients.

A common feature of the hundreds of bodies I've helped medical students dissect is that they have been exposed to an above average amount of surgery. It is understandable then that, having been wheeled in and out of the operating room multiple times, donors might want the next generation of physicians to be as well trained (if not better trained) than those who operated on them. Most donors, one may suppose, would then hope that, with good knowledge of the way the body is built, future patients will live longer and with less pain and suffering than what they experienced.

We may know nothing more about the patients who donate their bodies than their final wish. Students do not need to know any more about the deceased than the fact that they must transcend their reluctance to dissect out of deference to the donor. Patients clearly want their health care providers to have expertise in diagnostic procedures and hands-on interventions, such as surgery, that require acute knowledge of anatomy. Dissecting a cadaver to become well-informed about tissues, organs, and diseases is the genesis of patient-centered care.

Other models for humanizing the Gross Anatomy Laboratory

Many authors have explored the topic of how best to link gross anatomy teaching with caring for the living.[5-7] Some of this is driven by a fear that disassembling a cadaver is a desensitizing experience, and, without concerted effort, the Gross Anatomy Lab moves students away from a humanistic patient-centered approach to medical care.[8] This perspective presumes that a student who is fully engaged with preserved tissue may be indifferent to the person who donated the tissue. With their hands on organs

in the body cavity, the physician-in-training's attention is supposed to be fully on the morphology in, and at, hand. The student mind is not supposed to be wandering off pondering the life of the deceased. However, many medical schools now have formal programs of remembrance wherein students are encouraged to reflect on the lives of the donors.[9,10] Although research on whether such programs are effective (or necessary) is limited, it seems to be built on a premise that the Gross Anatomy is the antithesis of patient-centered care.

Contrasting gross anatomy with patient-centered care takes a narrow view of patient centricity. In the clinic, patient-centered care has come to mean eye-to-eye contact, where the health care provider talks with (not at) the patient.[11,12] A health care provider who has mastered patient-centered care is attentive to non-verbal signs of distress in the patient's posture and facial expressions. At its core, patient-centered care takes into consideration not just the physical but also the emotional needs of the patient, beyond what might be revealed with diagnostic tests.[2-4]

The donors of bodies for medical education do not envision their bodies being used to train students to be better at reading facial expressions. But, we would argue that the students' performance is nevertheless deeply patient-centered. Although we do not know all of the donors' wishes, we do know that the donors wished for their bodies to be viewed as cadavers, and for the students' full attention to be on their tissue. In the situation where all human bodies used for medical teaching are donated, there is evidence of implicit reciprocity, meaning that the patients are giving back to the medical system by their donation because of the service they received from that system.

Several papers have explored the idea of viewing the cadaver as a teacher.[14-17] This is taken from a Buddhist model, which is not the typical culture of the North American or European medical student.[15,16,18] It relies on a metaphor, and contrasts with our perspective, which views the cadaver as inanimate tissue, with a purpose inseparably linked to a once living person.

The power of the teacher metaphor relies on a social hierarchy where teachers are authority figures and looked up to with respect. This contrasts with the western model of patient-centered care that strives for patients-as-partners in health care.[2-4] This view contrasts sharply with the metaphor model, which uses a power differential to promote anatomical learning. The western model gives primacy to the patient (though deceased) and the patient's wishes over any decrees from a dominant docent. The teacher metaphor prods the students to dissect the cadaver out of respect for teachers whereas a patient-centered epistemology persuades the students to dissect out of respect for the patient.

Another model to make anatomy teaching patient-centered has gained popularity at various medical schools where students are encouraged to engage with the donor's family, often at an internment ceremony.[19,20] This is not patient engagement, but interaction with the extended family of the patient. At best, it can be seen as a proxy for patient-centered care. However, it remains impersonal as the students meet the families as a collective, and not the specific family members that were relatives of the donor of the body they dissected. There is no data showing that meeting members of the family of body donors enhances either anatomical knowledge or the students' ability to be truly empathetic when challenged by the needs of future patients. The programs are popular on the grounds that they encourage empathy toward those who grieve.[10,20]

Update from Sarah

Anatomy labs are now less stressful than my first experience. Nevertheless, I continue to reflect on the opposing, yet inseparable, ways to view the body. Am I respecting the donor when I treat the body as a cadaver? Am I doing what the donor wanted?

I am still finding the balance between acknowledging the cadaver as a once living person while also separating my emotions enough to view the body as a teaching resource in an anatomical setting. I believe that striving to concurrently hold these two perspectives allows me to gain the knowledge I need, honoring the dignity the cadaver deserves.

Patient-centered care

We have both witnessed how the initial shock of the Gross Anatomy Laboratory evolves into an interest in the fabric of nature, and into awe at the complexity of life and the diversity in the human body form.

The donors of bodies to medical education want medical students to excel in their knowledge of anatomy. However, dissecting a cadaver to learn anatomy is sometimes seen as contrary to a patient-centric approach to medical care. This view ignores the fact that the core to patient-centered care is knowing and honoring the wishes of the patient…even after they have died.

The argument for the student to dissect depends on cadavers being voluntarily donated for medical education. In the modern industrial world, which includes North America, Europe, and much of Asia, that is the standard

source for cadavers.[21] Although it is not universal, donor programs seem to grow as health care improves in various countries. Historically, countries that suffered severe poverty often had unclaimed bodies that could then be a source of cadavers for medical education. As socioeconomic status improves, individuals have more contact with medical care and fewer people die without social and familial ties. From trends in the industrial word, we can expect continued growth of body donor programs in countries that acquire better living standards and health care.

To the outsider, the students' first cut into the cadaver may seem a harshly desensitizing moment. In truth, it reflects an absolute commitment to the wishes of the donor. There is no credible rebuttal to the charge given to the new medical student, "If you wish to respect the patient who donated that body, you must take the scalpel, make a cut, and expose the tissue within."

Although it may seem paradoxical, patient-centered care begins with that first cut into the cadaver.

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