Janus

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An Introduction to Janus

The title of this publication is in reference to a symbol, or, in more clinical language, in reference to a sign. Janus was the Roman god of transitions and beginnings, and in some sense time. He is often symbolized by a doorway, an arch, or a two headed effigy that looks in opposite directions. Our "January" hails from his name, a time of reflection and anticipation.

Upon reflecting on some of these attributes I would like to consider Janus as a sign of many of the values and expectations inherent to the practice of medicine. Medicine requires a central position in time. As medical practitioners we are positioned between the patient's past history, present state, and his prognosis. It is here that the double-headed statue, with faces looking in opposite directions, assumes a meaningful pose in its metaphorical relation to the physician's place in the temporal aspect of care.

Next, and perhaps surprisingly, Janus derives from the word "janitor," someone who tends and maintains doorways and thresholds. While it may seem a long way to travel from the lofty notion of divinity to the humble position of janitor, the journey affords some insight into our roles as healers. We often encounter people who are very much in a transition. This may be a transition into sickness, and all of the cognitive and emotional processes involved; a transition into new life for the recently born child and family; a transition into absence in the case of a family of one who is recently deceased; or even a transition as simple as a patient empowered by their physician to make decisions that will affect their future health. The physician serves the role of being present to and managing these transitions. It is a humbling role because he is present in situations of gravity, and this gravity belongs to those who must bear it. This is not a role of glory or self-promotion, but is rather one of duty and often times self-denial. It takes the form of long hours, high stress, and plenty of sacrifice, but these things are only proportional to the importance of their function. If we learn to serve our roles as janitors well, as people who help tend to thresholds and transitions, then we will be better able to help patients through the important trials and joys they face in their lives.

Finally, working further off the notion of Janus as a multi-faceted (and indeed multi-faced) entity, we can extrapolate the concept of "perspective," or to borrow an

astronomical term used by James Joyce, "parallax." Parallax is the phenomenon of an object that appears to change depending on the perspective and location of the viewer. As many of us can attest from the many different backgrounds we come from, our perspective greatly affects the way in which we view the objects before us, and these perspectives are often different from other's views. This concept presents us with two of the primary tenets we hope to accomplish through this journal: 1) to foster a more widely embraced view of the many disciplines and perspectives that must exist within the physician's professional, ethical, and human makeup—essentially to develop a greater "parallactic" understanding of the patient, and 2) to provide a medium where exposure to these new perspectives may take place. With this journal, we hope to encourage each other's humanistic development by contributing to a multidisciplinary, well-rounded, and vibrant culture within our medical school environment that will aide us all as we strive to become more compassionate and effective physicians, scientists, thinkers, artists, and people.

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Full Circle

Elizabeth Dohrmann

I was 9 when I filled out my first donor card. A classmate's father came in his white coat to show-and-tell, awed us with a blackened, cancerous lung, and passed out the cards in what I realized later was a dramatic gesture to a third grade class. I took it home that night and marked a big X next to the line "I donate my body for any needed organs and anatomical research." The card required witnesses, so I asked my parents to sign. My dad was working at the kitchen table. He turned to listen, looked at me for a moment, and then nodded. Over the next few years, carrying it around in my plastic Hello Kitty wallet, ambivalence set in. I changed my mind a few times. I marked out the "anatomical research" part. I wrote in, "My body is NOT for research but for organ donation ONLY." I erased that. I wrote it in again. And then I forgot about it until I was 15, when my father died.

Thoughts of my father's donation haunted me for years. He died suddenly, after dropping me off at school for my final week of ninth grade. We had harmonized to Elvis that morning and he smiled a broad goodbye as I closed the passenger door. When he went missing that day I knew how to retrace his steps. I saw the paramedics rush in but never saw them leave. His body vanished. We were left with an apartment full of flowers and a haunting expectancy every time the door opened. It would be two years before he came back to us. I spent that time conjuring images of him lying in the medical school's freezers. In my art history class that next fall I became fixated on depictions of early medical practice, disease, and death. Those nameless students who were cutting him apart, did they recognize their responsibility to me? I feared the worst, the things they might be saying, the jokes, the ease with which they could cut through those hands that had held my life together. When my mother and sisters and I went to pick up his ashes, I was somber and wide-eyed. I desperately hoped it would be the epiphany I needed. All was silent as the subdued lab manager handed us a simple cardboard box with a white sticker on it, Richard Martin Dohrmann in faint Courier type. He was heavy. I held him tightly in the car on the way home.

I could not have predicted that I would one day be at that dissecting table. On the first day, when we had to flip our bodies over, I lost my breath as I felt the weight of our cadaver in my arms. Weeks later when we opened his skull, I was overcome. Seeing it empty of the brain that carried all memories, I closed my eyes and let tears slowly fall as I left the lab. When I called my mother later that day, reliving my despair of eleven

years earlier, she reminded me, "You aren't just grieving for your dad. You are weeping for this other man, too, and all that he was."

The day of the final practical exam in December I swept back the plastic barrier to the lab with some sense of finality. Like before, moving along from table to table, I reintroduced myself to those familiar bodies. When I reached him, I spent an extra moment before moving on. Afterwards, when our locker was empty and the only remaining voices were far down the hall, I lay my hand once more on his arm. Somewhat compulsively I squeezed it, let my breath return, and walked away.

"Nature, Mr. Allnut, is what we are put in this world to rise above."
-From *The African Queen*, 1951

Coming to medical school is a bit like immigrating to another country. Everyone in the room speaks another language, and seems to know it better than you do. The traditional dress is a white coat and blue scrubs, and you put them on the first day, and, looking in the mirror, are satisfied that at least on the surface, no one can tell you're a foreigner. The cuisine is paltry at best, generally consisting of frozen pizza or whatever requires the least amount of preparation. The social norms, manners, and codes of conduct are clearly outlined in a pamphlet on "professionalism" you receive before, metaphorically speaking, you leave passport control.

Perhaps the most disarming of all customs is one of the most ancient rituals in the profession, cadaveric dissection. In this honored rite of passage, a person must deny what is most basic to their nature in favor of acclimatizing to the culture of medicine. One must transcend the basic instinct of the preservation and sanctity of human flesh and perform actions such as disemboweling, dismembering, and sawing a skull into even halves. They must treat this a routine action - one that is at times tedious, often fascinating, and occasionally comical.

The bodies dissected in this ritual are as much a part of the community as the students themselves. Most bodies are named by the medical students that work with them. They are not given object names, but proper people names, like Hank, Rosie, and Eleanor. Our cadaver's name is Rita, and we often talk to her as if she's standing next to us. We read our dissection manual, review origins and insertions, discuss things of interest that we find, and at the same time joke with her... "Rita, you silly lady... where are you hiding your lingual nerve?"

When we talk to Rita, she can't talk back, but somehow, she's still articulate. Her body, though not living, speaking, or breathing, finds a way to reach across the veil, to speak to us through our own interpretations of what we see, to tell us, in her own way, her life story. I know from studying her body that she once had abdominal surgery. I know she likely died in hospice, and that a nurse, in an act of kindness, gave her a manicure before she died. I know from her bedsores that she had been sick a long time. Our

cadavers are powerful because of this mysterious loquaciousness. Rita and her fellow cadavers are powerful in the way that they make us reflect not only on our mortality but the experience that we are sharing with them.

What I've learned over the course of the last semester is that the ritual of dissection is not about suppressing our instincts, but in fact, quite the opposite. We are not meant to completely rise above our nature as human beings, but merely to accept a responsibility greater than instinct, more profound than ourselves. We are meant to bear witness to the miracle of creation, and experience through our cadavers, mortality. We are meant to reflect on death before we are given the privilege of preserving life.

Between the time that we are introduced to our cadavers at the start of the semester and the final lab, we change fundamentally, as living people. Our cadavers live a second life, giving us the gift of courage to confront death and humbling us with the immense complexity of their bodies. Our cadavers are our teachers. Rita's body will stay in my head for the rest of my life. Whenever I see a patient's heart, I will remember her heart. Whenever I deliver a child, I'll bring life into the world remembering the shape of her uterus. I will remain forever grateful that her last act in life was to change mine.

Anatomy Writer's Block

Robert Hester

I have to admit to having writer's block. How exactly do you put in words the myriad thoughts that have crossed my mind over the last 3 months regarding our cadaver – or more appropriately, our first patient? I thought about coming at this essay from a numbers perspective: 100 billion neurons in the human brain, 700 skeletal muscles (give or take a hundred), 165 students in anatomy class, 40 cadavers, 33 vertebrae in the human body, 2 lungs, 1 heart. I thought about all the patients my lab mates and I will see as physicians. Of course that will vary, but if we estimate it at say, 10 new patients per day for 5 days a week for 48 weeks out of the year over a 30-year career, that is 72,000 patients each. Combined, that is 360,000 total patients that will benefit from the knowledge gained from our one anatomical donor. But that seems a little gimmicky. Scrap that.

So I thought about approaching this essay from the perspective of language. I could mention the verbal gymnastics that go along with the study of anatomy. I could list the structures that at first seemed so foreign but now seem totally mundane: the anterior superior pancreaticoduodenal artery, the hemiazygous vein, the pharyngeal raphe, or the crista galli. I could mention the countless mnemonics – mostly obscene – that we used to remember arteries and their branches, and the branches of those branches. Actually, come to think of it, I'd better not. I could share the lexicon we seemed to invent out of nowhere that went along with the dissection process – mostly verbs – "try flossing it," "can you Netter's it?" or if we're in a hurry that day, "let's just bold-face it." But of course, when a total stranger has given his or her body to be cut open, poked, prodded and catalogued, words and language are equally insufficient.

I could tell the cold hard truth – that anatomy was difficult, frustrating and often disgusting. That sometimes it generated more questions than answers. That most of the time, I felt a little lost. That it was also fascinating, thrilling, humbling and incredibly fun. That it gave me a chance to better know four amazing people, and the opportunity to better know myself. That because of this donor, whom I feel like I intimately know yet will never know, I will be able to help others. Yet somehow, that still doesn't capture it all. So I guess all that I can say – all that is left to say to my very first patient – is, thank you.

Beauty Within the Details

Rakesh Patel

I think there is something beautiful about the science of saving lives. It's the one subject worth studying above all others. Imagine how many potential Michelangelos, Galileos and Orwells have died in the third world for want of medication that we in the first world can get over the counter. Progress in medicine allows art, music, sport, literature, anything worth living for really, to flourish. Oftentimes unnoticed and unappreciated, medicine is as necessary for cultural progress as the root is to the flower.

It's entirely possible and more than likely that I'm romanticizing medicine and I should stop before worn out, desiccated phrases like 'healing hands' and 'noble profession' begin to make an appearance. But it's not a crime, semantic or otherwise, to stand in absolute awe of a scientist that is willing to devote years into the elucidation of a single enzyme or pathway. I'm missing whatever gene it is that imparts that relentless passion in scientists, especially in the face of consistently disappointing results, to keep searching for answers.

For the treatment of cancer, it takes thousands of scientists, clinicians, researchers and students, working as one organism to create the most heartbreakingly infinitesimal improvements in a patient. Yet these successes are celebrated, and rightfully so. Progress in medicine is incremental, but look at how far we have come: we tweak DNA, we manipulate stem cells, we control prosthetic limbs with our brains. In the grand scheme of things, we are moving mountains.

It wasn't until we truly began to look inside ourselves that we discovered the universes coming to life and dying within us every day. Each cell a distinct world, communicating with organ systems far away like strange planets exchanging hopeful messages. It's even more remarkable when we consider that the effort is all for us: these messages translate into our thoughts, ambitions, dreams, and desires We were breathtakingly naïve in our understanding of anatomy before we followed our curiosity into our cells, and the truly hard work lies before us. In medicine, all that is left is nuance. The details lay dormant in our cells, waiting for us to find them.

The future of anatomy is intimidating in its complexity. The microscopic structures within us challenge our tenacity far more than any external challenge can. We have

been to the moon and we have seen the bottom of the ocean. However the greater challenge lay within us: the Olympics show us again and again that we can try to push our anatomy to its physical limits, but we keep discovering that capacity may well be limitless. I initially set out not to romanticize medicine but it seems difficult to avoid. The only thing left to do is see what else our anatomy has in store for us, and there is a strange sort of beauty in that prospect.

For Henrietta

Tatevik Minasyan

On the first day,
As I gazed upon this cold mass
My heart sunk, my voice crackled.
On the first day,
As I gazed upon this cold mass
Only one grim thought
Had me tackled.

I saw death As a cruel maiden I saw death As a putrid end.

As time passed, I grew braver She grew closer. As time passed, I became smarter As she became our tutor.

Hands.

They seem as the most mundane of things. Hands.
They seem as the most beautiful of things.

That one day
We had to study her hands.
Her old, cracked, arthritic hands,
Her exquisite, amorous, angelic hands.
That one day
I broke down.
That one day
I just could not.
I looked at her hands,
Her magnificent hands
And all I could think of was her past.

As Baruyr Sevak once said: (Armenian poet)

[&]quot;These very hands, a mother's hands,

These old and new hands.

Rocks have been turned down by these very hands
And mountains moved
Whatever, whatever
Whatever they don't cost
These very hands
These tender hands
These holy hands.
These very hands
That have been worn out
And also become rough

But for all of us They are as tender as silk These perfect hands A mother's hands."

Around the last days, I feel no cold. I feel no death. I feel no repugnance. Around the last days, All I feel is her warmth. Her soul, Her smile, Her heart.

Gratitude is never expressed literally.
Gratitude is never expressed verbally.
Gratitude is deeper.
Gratitude in my heart is all I can be offering
To this beautiful woman who gave us everything.

The Journey to the Underworld

Josh Sumislawski

The choice of *Janus* as the title of this journal invokes the enduring influence of classical antiquity on modern medicine. Not only is the word "medicine" derived from the Latin verb *medicare*, which, not to anyone's surprise, means "to heal," but also much of the vocabulary and symbolism of medicine as we know it is heavily rooted in classical mythology. From the rod of Asclepius, which appears on the sleeve of our white coats, to the Achilles tendon, which we dissected in anatomy lab, connections to ancient Greece and Rome surround our experience as medical students.

Having studied classics in high school and college, I find it hard to escape the story of Aeneas as an appropriate analogy for our own long and arduous journey through medical school. Fleeing the fallen city of Troy, the legendary hero of Vergil's *Aeneid* must overcome numerous obstacles to fulfill his destiny of reaching Italy and founding the Roman race. One of the most emotional and formative experiences of this ordeal is his trip to the underworld in Book VI, in which he visits his deceased father and learns about the future of the Roman people. This visit to the kingdom of the dead, I would argue, serves as a simple yet powerful parallel to our experience in gross anatomy.

Although indisputably less heroic, we are granted the most unique of privileges as we descend to our underworld, the basement of the Wittenborg Building. For Aeneas, the purpose of the journey is to seek the wisdom of his ancestors, and so, too, is it for us. Through the process of dissecting a cadaver for a semester, we develop an intimate relationship with the deceased. Though no longer alive, they reveal to us the complexities of the human body, and we emerge with new tools to help the living.

Visits to the underworld are not exclusive to the story of Aeneas but rather are common, formative experiences for other literary and historical figures such as Odysseus, Dante, and even Jesus Christ. Aeneas's journey, however, stands out in one way. To return from the kingdom of the dead, Aeneas passes through the gate of false dreams and therefore, many scholars believe, does not remember what happened. I find this subtlety rather poignant in light of our experience in gross anatomy, as I imagine few can still recall the intricate details of the human body we once knew well. Instead, we retain the most fundamental lessons of the journey: to examine meticulously and think critically about our patients' problems, to treat every person

with the utmost respect, and to marvel at the wonders of the human body we can never comprehend.						

Unexpected Lessons from Gross Anatomy Lab

Charles Duke

"It's weird again," Eric said the day we first saw our cadaver's hand uncovered. In the previous month we had skinned this man's back, broke open his spinal canal with a hammer and chisel from the hardware store, and ripped shockingly large nerves from muscle fibers down the length of his arm. After a week of working with him we'd gotten over most of our trepidation and focused on learning an enormous bulk of information as efficiently as possible with little time for sentiment. The gravity of working with a human body had largely slipped from our attention.

Still, in waves and at unexpected times, we learned humanizing details about him. We discovered that he had probably not died of lung cancer, though he certainly had a large tumor in his right lung that ultimately spread to his heart. We learned that he had unusual vasculature in one arm and that the nerves of his chest didn't match up with our textbooks. I guess we know some things about him that he and his closest friends and family had no idea about.

While finishing up our gross dissection for the semester it occurred to me that we had become brazen. We weren't upset to see humanizing details and do dehumanizing things and we had stopped trying to dissect perfectly. I worried about desensitization and that we were becoming uncompassionate, mechanical, and irreverent—but this wasn't the case. There is still compassion and reverence in our work; we've just become comfortable with not wearing it on our sleeves. We are here to get the experience we need because at the end of gross anatomy, all of the people we work on will want to recover. If we've learned enough and because of this man's gift, they will.

Remains

Olivia Ann Morin

I stared down at my cadaver. It was December, and we had already made our way through a hundred hours of dissection. I looked at him, him, for what seemed like the very first time. From the outside, he was fit and tan- a swimmer, perhaps. He wasn't very old. For months we made our way through his back, arms, legs, and thorax. For months, we had no idea how or why he died, except for one word on his tag: melanoma.

When we sliced open the abdomen, there it was. We were finally face to face with his fatal enemy. Tumor was everywhere, his abdomen overflowing with this growth that had taken over his kidneys and his spleen. It filled every inch of what would otherwise be known as cavity. It cut through his aorta. We found difficulty in distinguishing one organ from another, both visually and physically. This tumor, his demise, was hidden in plain sight this whole time, tucked just behind perfectly crafted abdominal muscle covered by one measly layer of weathered skin.

I stared down at my cadaver. It was December, and I had just been diagnosed with Hodgkin's Lymphoma. Looking down again at that tumor, I felt my pulse quicken. I felt my own tumor pushing against my lungs and sternum, a giant mediastinal mass situated just behind my own pale but healthy looking skin. I couldn't breathe. Shaking, I reached down and touched part of the giant mass invading his left kidney. For a moment, there was nothing else in the world. I was inside.

I thought of this man's past, his struggles and triumphs, which the world will never know. Did he have any idea there was a storm brewing inside of him for so long? Did he fight to stay alive with everything he had? Did he ever feel like giving up? I wanted to know him. I wanted to know him so I could know myself. How hard would I be able to fight and would I ever feel like just giving up and would it be okay if I thought that? Thoughts swirled around in my mind so violently that I had to physically steady them with a deep breath. I had so many unanswered questions. I found no solace in the answers I received from the living.

It seemed only too appropriate that he become my salvation, bringing closure to my burning questions. Touching the hardened, grainy beige mass, I felt empowered. There was such strength in his answer to me, in the pure physicality of it all. Nice to meet

you, giant, invading tumor mass, but you will not get the best of me. I would take on this menacing, awful group of cells that had taken up residence in my body. I would fight with everything I had, both for myself and for him, because he no longer could.

I stared down at my cadaver. It was December, and for just a moment, I saw inside to a man with hopes and dreams and heartbreak. The same hopes and dreams that would carry me though the long, hard months of chemotherapy and into remission. The same hopes and dreams that continue to inspire me, everyday. A year has passed, and my tumor, now but lingering scar tissue, remains inside of me, a reminder of both struggle and triumph. Struggle and triumph that is not solely my own, but his as well. For just as my fingers once rested upon the culprit of his demise, so now they work to bring healing and light to the world of the living. My questions answered and strength renewed, I will forever cherish his gift, as his lives on, inside.

Anatomy of a Freshwater Spring

Matthew Lorenz

There's a freshwater spring in northern Michigan called Kitch-iti-kipi. Its oval surface is twice the size of an Olympic swimming pool. It's as deep as the old pines along its shore are tall.

It's a quiet place.

A wooden raft is tethered to a cable that hangs a few feet above the water. Turning a wheel moves the raft along the cable and across the pool. On the first turn, we slip past pieces of driftwood that obscure the shoreline. Like branches perched on the edge of a cliff, these shells of trees hang precariously over an unknown depth. We move a few feet from the shore and—suddenly the world appears to fall away below.

For a moment I don't comprehend what I see. A skeleton of ancient tree trunks branches from the pool's unexpectedly steep walls. Pockets of bubbling sand signal the influx of water from unknown channels along the bottom some 45 feet below. Dozens of trout—mostly small and near the surface (or are they large and quite deep?)—sway in and out of indiscernible currents.

This scene is not altogether unfamiliar. There must be many springs full of dead trees, fish, and bubbling fissures in the underlying rock. But—in my mind—the water there is always murky. The fallen limbs disappear not far beneath the surface. A fish jumps and splashes and dives back down. And although I can't see it, I know the water comes from somewhere below. Yes, these are the springs that I have always known.

Until today.

Early Indians called Kitch-iti-kipi by another name: "the mirror of heaven". Through the glass-bottomed raft, I see what they saw: a world with aqua-colored air—silent, but alive.

Many of the trees in the water are ancient, reduced to brittle trunks mineralized white by the water's high calcium chloride and other compounds. They make the water unlivable for most animals, but a sanctuary for the fish. As I count the trees along the walls and the deep, my mind drifts to the trees' purpose here: a source of nutrients, a

shelter for fish, maybe structural support. I follow the slowly bowing curve of one trunk down to the craters of white sand at the bottom. I imagine an underwater lunar desert, its random dunes casting shadows into adjacent valleys. But these forms are not random at all. Beneath the sand is a bed of limestone, under which flows a stream that connects to a nearby lake. Hydraulic pressure forces 600 liters of water per second through fissures in the limestone, rhythmically churning the sand, sifting and shifting it until it settles into otherworldly shapes. I overhear someone say that the sand turns black upon contact with air. Somehow this too seems to fit.

The raft, though slow, is still too fast. There is much to take in and the crossing is short-lived. Stepping onto the shore, someone claims to have seen other fish besides trout, like perch. I don't know one from the other, but know there will be a time to learn this difference another day.

As I walk away down a path through the pines, I think about the meanings of "Kitch-iti-kipi", a Chippewa word. Among them are "drum water" and "sound of thunder". I smile at the thought of these words describing the silent spring. It makes me wonder if it was always this way. It makes me wonder if this spring has something for each of us to take away.

Henrietta

Laura Sherwood

The vagus nerve is found in the posterior mediastinum.

The lateral plantar artery forms the deep plantar arch.

The pronator teres muscle has two heads -

allowing passage of the median nerve

You can say it all day

draw a diagram

make a powerpoint

write it in a book

put it in an exam

and I'll learn it

assimilate it

process and store it.

But -

if you let me touch it

feel it

trace it

cut it

my hands so cold

my eyes watering

and the scissors opening and closing

our sharp discovery guided by blunt dissection

Then -

I will know it for the rest of my life.

The finest teacher I ever had. And you never said a single word.

Undying Altruism

Mercy Kibe, Kevin Ouma, Fedoria Rugless, Murcellus St. Louis

As you enter the grey automatic doors of UT's own version of Grey's Anatomy, the first person that you will encounter is Sir Altrustar. Sir – meaning teacher in this context; and Altrustar – a name implying his altruism and an acronym derived from our group members' names. He sets the precedent for the rest of the lab. He's a very quiet, mild mannered gentleman who lies patiently on the first table in the first room, greeting you with a peaceful smile. So willing to give his all so that we can obtain a greater understanding of the human body.

He ensured that he kept his body in good health so that all of his features and structures would be retained and intact for us to identify. His muscles, nerves, arteries, and veins were always very visible and well defined. From his well-maintained body we know that he valued his health and took care to preserve himself, even at the age of 89. His body also reveals the painful events in his life, such as the screw and metal plate piercing his tibia. For the past few months we have traced vessels, appreciated nerves, exposed the origins and insertions of the muscles in order to fully comprehend how the human body works.

Through Sir Altrustar, we gained knowledge about human anatomy not afforded by a textbook or atlas. When Sir Altrustar made the selfless, courageous decision to donate his body to science, he made a decision that would leave an indelible mark on the rest of our medical education. For his gift, words cannot express our gratitude and appreciation. Today, we want to take a step back and express our thanks to the man that Sir Altrustar was before he lay on our dissection table; his preserved body vulnerable and at the mercy of our dissection skills. Sir Altrustar's anonymity created a disconnect that helped alleviate some of the discomfort of cutting into another human body; but this anonymity also serves as a reminder that Sir Altrustar was someone's husband, father, grandfather, and friend. Giving of himself so that we may learn, he has inspired us to give our all to help and enlighten others. Sir Altrustar successfully guided our journey through the human body, and for that he will always live on as our first patient.

Unexpected News

Natalie Guley

I stood next to the oncologist in clinic today and listened to him as he quietly explained to our patient that they had "fought the good fight." It was implicit in the conversation that treatment options had dwindled. His scan showed white masses scattered throughout the darkness that were his lungs and liver. Like tiny points of light in the night sky, they represented something much bigger than how they appeared. The gentleman, an old retired veteran hardened by years of military service and tough work in the sun, sat next to his tiny frail wife. She looked at me and smiled as she explained how she had never missed attending a radiation treatment with her husband, and she hoped she wouldn't have to miss his treatment next week due to out of town family visiting. Her husband sat there wringing his hands, the only sign I could detect that he was anxious, or perhaps sad or angry. He looked up and told the doctor, "My daughter is on her way, she's going to be very upset." A pit lodged in my throat, and I suddenly had to struggle back tears. Four years ago I was the daughter receiving similar news.

As the doctor wrapped up the appointment, we opened the door to leave and our patient looked me straight in the eyes. He said, "I was just telling my wife earlier that when I go, I want my body to go to your medical school." In that moment I learned the only thing gross anatomy couldn't possibly teach me - the selflessness that allowed each of these individuals to give his or her body over for my education.

For weeks I've struggled with what I should say about my cadaver. I feared sounding contrite or calloused or overly sentimental. Today I realized that, in true medical student fashion, I was over thinking it. This process is not about me; it is about the people who have led us through this four-month journey. And how, although many of them knew they had reached the end, they cared so much for the health of others - people they will never have a chance to meet - that they wanted me to learn from their bodies. It is a realization that leaves me indefinitely humbled and grateful.

Chelsea Cooper

"My poor carcass is hollowed out, voided by anaemia. Pain echoes through it as a voice echoes in a house without furniture or curtains. There are days, long days, when the only part of me that's alive is my pain."

- Alphonse Daudet, In The Land of Pain

I noticed how my breath caught slightly in my throat when at first we pulled the sheet back over our cadaver. Slow release as my mind cajoled me – it is not real. Well, yes, real enough I suppose, but not really a person, after all. The pallor of its flesh, turned a yellow-gray, and the absolute stillness of the limbs – all of it reminded me not to regard the cadaver as a human being. For me, adjustment to dissection was shockingly rapid, but in some ways not surprising at all. The body became an object, which is to say a physical thing, ontologically simple. Though I could imagine all the same structures, more or less, in my own body, reflection about my own body or my classmates' never really allowed for confusion. With their pink, supple skin and the subtlest of muscular movements, my classmates could convey a living world of complexity and change. A wrinkle of the forehead, an agitated foot tap, the slightest crease of a smile – all of these suggest many things all at once, such as emotions, past experiences, internal dialogue, and struggles. All of the things that grant humanity. My cadaver, on the other hand, remained a blank slate, impossible to read in the characteristic ways of understanding another person.

The-body-as-object can make its appearance in a variety of ways, but none more striking than through the divorce of its living counterpart. In German, there are two words for 'body' that help to make an important distinction exemplified by the cadaveric body – "Körper" refers to the physical, mechanical body, or the body-object. It is also the body found in dualistic interpretations of the self, i.e., mind and body. This can be compared to the term "Leib" which can be translated to the 'lived body,' one which encompasses both the body-object as well as the subject. It refers to the body as it is experienced as the locus of all experiences. Importantly, Körper is one way in which the body can present itself to experience, that is to say, even one's own body may at times present to the self as an object, as is captured in Alphonse Daudet's words as he struggled with tertiary syphilis. Thus, there are cases when the body can appear to the self as an enemy or barrier. That is, it can become a thing that inhibits action rather than its normal facilitation of purposeful action, such as when a person

loses the ability to do something they used to, like a brisk walk in the park for someone with arthritis. The body can also seem to act on its own at times, as with chorea or ataxia. More commonly, concerns over body image can bring the body into focus as an object among other objects, rather than something that is lived through. The quiescent body is the one normally experienced; it rarely comes sharply into focus, barring times of relative disruption. When, for instance, I choose to walk to the kitchen for a snack, I am only vaguely conscious of moving my legs. Rather, my mind is making an inventory of all the food choices available. Should I, on the way, happen to stub my toe hard on the doorway, the process of walking and movement (and thus the body-object) would warrant more attention. In that way, Körper can manifest as a hindrance to me and my volitions, and especially if permanent, can alter my experience of being in the world.

But what does this have to do with my cadaver? My cadaver reminds me that, although it is Körper, it once was Leib. In the same way, the bodies of myself and others around me encompass both Leib and Körper. I am the only one who can experience Leib, since my own body is the locus of my personal experiences. This does not however mean that other bodies are just Körper, though this is what tends to present itself in a physician's physical examination. Though alive, the body can be seen as an object among other objects if one does not guard against such mental tendencies. It seems to me important to remember the Leib that exists in each person, in each patient you meet. Havi Carel, a philosopher who has written on her experiences with a rare lung disease, explains it this way in Illness (The Art of Living Series), "If disease is seen as a malfunction of a body part, it (and the ill person) will be treated very differently than if it is seen as a world-transforming event, modifying the life-world of the ill person." The malfunction of the body part is, of course, a component of illness, much as Körper is a part of Leib. Leib expresses the body that experiences. that reaches outward as the subject and is simultaneously acted upon as the object. Illness acts upon Leib, often overwhelmingly more than Körper.

The card with the cause of death for the person that became my cadaver read: Alzheimer Disease. I could only imagine the transformations of her world that occurred during her illness, but as that dreadful image I have of her in life - gazing out of her nursing home window, withdrawn from the world and unable to recognize the people closest to her – appears in my head again, I remind myself of the wisdom she has given me. The real goal of medicine is not merely to cure the disease of Körper, but to heal the illness of Leib.

Berta

Elizabeth Lane

though she has passed on she still imparts her wisdom alive in knowledge

Perspective

Sheg Aranmolate, Faisal Shaikh

Dull lights flickered from above and the low hum of manmade beasts resonated in the room, polluting the stillness of night. The acrid smell of "preserving juices" tingled the nostrils and irritated the eyes like aged onions. The fumes of my once vibrant body now lift off, listlessly traveling the cold damp space around me. Sentimental moments, physical caress now are reduced to pale tendons and foamy in-betweens, striations and specimens. The intrusive nature of human curiosity transmitted through the heartless prods of laughing children too full of life, of color and the red of blood to be concerned for this "assignment" wrapped in cheap plastics and rags, suffocated in death by her own fluids and extraneous remnants. Bits of me now lay in a tin basket that swings steadily somewhere beneath me.

My once beautiful hair that moved freely in the wind and danced to the bustling rhyme of life is now a tangled mess on my scalp—stiff and without zest and falling at will like leaves on a withering tree. My once manicured finger nails are frail, chipped and filled with grease and the very scum that I despised.

"Brush your teeth after every meal!"

"Wash your hands thoroughly every time you shake hands with strangers."

"Shaking hands is worse than kissing!"

"Wash your hands thoroughly—don't forget the soap."

Words I chanted every time I looked in the mirror in the morning—words that now seem so distant and foreign to me.

Anyway, who cares about my teeth, eh?

All the effort and all the fussing—what a waste of time!

As my once white and glistening teeth are aged and browned and let's not forget, crooked. What a shame! My muscles are flaccid and I am weak all over, consumed by my infirmity. The bed on which I lay is flat, cold and uninviting to the back. I'm now a

prisoner in my own body and the relics from my past can be traced through the wrinkle lines on my stoic face. The scars that adorn my contoured skin are remindful of my tribulations and my calloused palms and knuckles relay my upheavals in life. And the tattoo—yes, the ugly one on my chest exposes my infatuations and the impulsivity of my youth.

Nauseated, embalmed, entombed within a cocoon of stale body accompanied by my stale memories. Their deep slash, slanting from medial to lateral lat dorsi, from Teres major to wherever minor, apparently cuts through muscle that allowed me to hug him, and then keep him there. Hm, but he responded as limply as these muscles feel now, torn, perforated, and hanging over the loose lips of my reflected skin. Some metaphor, some correlations that might elicit some sympathy in you, but No! She is dead; she can't feel this prod, this poke, this unruly pulling and pushing. But there is pain, oh there is PAIN. It may not be neural, it may not be conscious, but I FEEL it; this is my body... was my body. Oh I am in between. I don't know where this is. I don't know what I feel. What separates life and death? Is it a gravestone and the warmth of mother earth incasing us? Is this gaseous room with its little currents of formaldehyde coursing around stubbornly like the pockets of blood that roam my veins, the same as a grave? Well I know a part of it. The difference between life and death is the difference between a hug and a dissection—a caress and a palpation.

He is still alive but he won't get his hand on me now. He couldn't make it down here, these can't be his hands groping and exploring the inner caverns and tissues of my biology. All my anatomically correct proportions, insertions, orientations don't tell you anything about me. Is this really all you see me as? A network of life supply, strands of red fibers and comportments of minutia?

Can't you see, use your osteo-logic and understand me!

A True Story

Renate Rosenthal

My husband's name was Ted. His parents named him Ted Lee when he was born, in a New York City hospital, on Saint Patrick's Day in 1936. A nurse decided Ted was not a real name and put "Theodore" on his birth certificate.

He did not know he was Theodore until the first day of first grade. The teacher took roll, came to Theodore, and none of the children answered to that name. She called again, this time using the last name as well, discovered the missing child, and made a sarcastic remark about some kids not knowing their own names. The other children giggled.

He never used his legal name except on government documents. All his diplomas, degrees, and writings bore the name "Ted L."

We were together for 30 years. Twenty-nine of them in a wonderful, close relationship, until he died, quickly and peacefully, of an aggressive malignancy. The thirtieth year was the year in which I dedicated every fiber of my being to the daunting task of grief and mourning. "Grief work" is a full time job.

By year 31, I had succeeded in weaving a beautiful and rich tapestry of memories of my life with Ted; a tapestry of many strands, many textures, many colors and patterns. I am reserving any leftover strands for the next panel.

Ted was never afraid of death. We both saw death as a normal part of the cycle of life. As part of the journey. He talked about dying the way other people talk about where they plan to go on their vacation. At first, this made me anxious, as if talking about it could bring it on. Over the years, I got used to it.

His favorite passage in the Bible was the chapter in Ecclesiastes which goes "a time to sow, a time to reap, a time to be born, a time to die...." He always hoped he would die fast when his time came, and he made me promise early in our marriage that I would not let doctors prolong his life if all it would do was add a few months of suffering. He got his wish.

He had strong likes and dislikes. He loved nature, wide-open spaces, animals. He loved honest materials: solid wood, stainless steel, tweed fabric. He loved Greek drama, Shakespeare's tragedies, experimental theater. He loved Russian composers and Johann Sebastian Bach. He loved sitting in Gothic cathedrals in Europe and listening to pipe organists practice their music.

He hated plastic, rap music, sentimentality, and fake. He despised opportunists and purveyors of quick fixes. He had contempt for most aspects of pop culture, stating that calling it "culture" was an oximoron.

He loved to play mischievous tricks and funny, creative practical jokes. He loved to laugh and make others laugh.

At the top of his hierarchy of dislikes was the IRS. Right below were funeral directors and televangelists.

Three years before he died, long before he knew that cancer would take him away, he wrote a will, which contained specific instructions about his funeral. He wanted to give his body to science. Should the law require a formal burial, there was to be a competitive bid, with the job going to the one with the cheapest price. There was not to be a public funeral ceremony.

Then came a list of "liturgical, poetic, or theological gentry" who were not to be permitted to "utter pronouncements over, nor diddle with" his mortal remains. This alphabetical list included:

Alchemists

Astrologers

Brahman

Cantors

Clergymen

Consolers

Doctors of divinity

Ecclesiastics

Evangelists

Fathers

Friars

Ministers

Monks

Mullahs

Non-denominational spokesmen

Pastors

Philosophers

Priests

Prophets

Psalmists

Rabbis

Rosicrucians

Shamen

Shepherds

Spiritual or supernatural guides

Talmudic scholars

Unitarian-universalist commentators

Warlocks

Witnesses

and

Zoroastrians

A to Z.

He delighted in reading this list out loud to his friends.

After Ted died, his body was taken to the University for scientific study. In return, the University would arrange for cremation. Meanwhile, I picked a burial place under one of his favorite trees and planned a private ceremony.

The University called a few weeks later to announce I could now pick up the "cremains." Friends offered to support me on this trip. I preferred to go alone. I wanted no distractions. No obligations to spare others the agony of seeing my pain.

The Anatomy Assistant, a pleasant and sensitive man, handed me the small box of ashes. About the size of a football. Heavier than I had expected. Hermetically sealed. He told me that the research project for which Ted had given his body would help thousands upon thousands of people.

I took the box and walked out of the gloomy building into the brilliant fall sunshine. I walked along the park in my blue jeans, cradling the box with my husband's ashes in my arms, sobbing, tears streaming down my face.

I finally made it to my car. I unlocked it, plunked myself down in the driver's seat, slumped over the steering wheel, and wept and wailed for a long time.

Finally, I composed myself enough to start the car. As I backed out of my space, I noticed the license plate on the car to my left:

Ted L. 1

Yes, indeed! Ted L. WON!!!

I felt a mischievous smiling presence right next to me in the passenger seat.

Memorial

Robert Franklin

It is under strange circumstances that I write this to you. It is at once a token of thanks for your sacrifice while also an apology. Because for the past 4 months I have waged war on your body. With the hammer, the saw, and the blade, I have submitted your body to dismemberment and exposure. I have broken your bones and torn your flesh.

Selfishly, I want to provide justification; I explain to myself that this is the exchange necessary to gain the knowledge of healing. And I believe this is true, for I cannot help but recognize the immense knowledge you have enabled me to have. And yet I would not call this justice, and I want you to know this. Because this process required your sacrifice, and it was a sacrifice that is heavy with meaning and the reciprocity has not yet been fulfilled. You have initiated and enabled a journey for me that I pray moves me towards a life of healing and service. You have also provided me with invaluable instruction to certain perils. Because I now realize that I am able to drown the humanity out of your body, to drown the history, the experience, and the sacrifice that you represent. I drown it with my stress, with my desire for achievement, with competition, and with apathy. For this I apologize. And I realize I will encounter this again when I treat a patient. I will at times forget the weight of their life and only consider their fractured bone, their lab results, their ability to pay. And here is where the war rages on; here is where the injustice flourishes. You have taught me to be more aware, to recognize you and the life that you led. Your muscles bespeak strength, your arteries show an attentiveness to health. You lived to be ninety nine years old, and you made a decision in life to help others. For this I thank you, and for this I recognize your sacrifice.

And it is in this recognition and thanks of you that I wish to rethink my time with you. Because over the last four months, the hammer and the saw have been transformed from weapons of violence to the tools of growth. They are now more like the hammer and saw of the carpenter who creates things useful and beneficial to others. It is a metamorphosis that could have only happened as a result of your humanity and gracious nature.

And so I thank you. I thank you for allowing me to learn from your life through your body. I thank you for teaching me more of the perils of selfishness and apathy, qualities that pale in the light of others' suffering. And I thank you for granting me the

opportunity to take these hands of mine, my most basic and fundamental tool, and begin to transform them into tools of humanity and help. I recognize the charge you have given me through your decision to share yourself in this process, and I will honor that charge in my life and my learning and my support of others.

Most gratefully, Robert A. Franklin Forty Five Years! Oh my goodness! Where did all this time go? It is hard to believe that 45 years has passed since I started my faculty position here at the Department of Anatomy and Neurobiology so long ago. I gave my last lecture to my last medical class just a few weeks ago. I can hardly remember my earliest days and months here in the department. However, I do remember well and owe much to a number of great members of the faculty that were here in the department when I arrived. I learned so much from them and had the privilege to learn from such great teachers as Dr. Wilcox, Holbrook, Fedinic and others. I know these names probably mean nothing to recent students but they are most important to me and to any of your parents who went to medical school here. Just ask them.

As you look back over time and evaluate what things are really valuable and important, it is not the things, the stuff, or the titles that you receive. For me, it has been the many relationships that I have developed with so many students and others. Don't ask me how many students, but I have taught every medical student that has walked through these hallways since 1968 (remember, almost none of you were born then). When one has such opportunity to touch and hopefully impact so many lives, there is no other greater opportunity or reward. I remember so many faces, but seldom the names (sorry about that). My family's curiosity game over the years when we are traveling has been who is going see me in some public place, call out my name, and come over with great stories and memories of gross anatomy and other UT events. It hardly ever fails that if we are at a restaurant along the interstate or a shopping area anywhere in Tennessee that I see a former student. They tell me stories that I have forgotten. It is also amazing now that I am teaching children of former students. Now that will really age you!

It is very awesome to have had this tremendous opportunity. It has been amazing to watch the transition and progression as students walk into the gross lab on that first day of class with some reluctance to meet their cadaver, and then see how much professional and personal development they have accomplished over the years at graduation. There are so many great memories wrapped up in all of these years, and I will treasure them forever. The simple word is not enough but THANKS to all of you students.

Jack L Wilson

Please contact JanusLit@uthsc.edu with comments, questions, and submissions