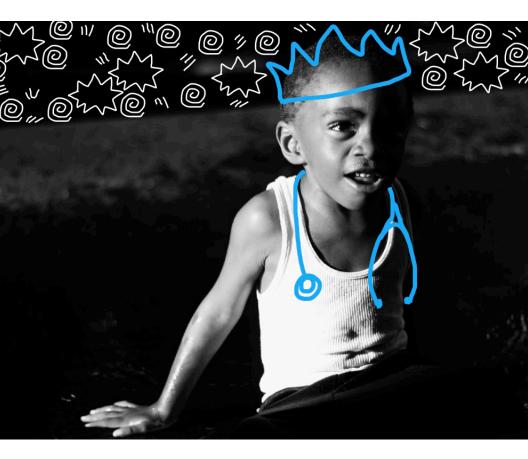
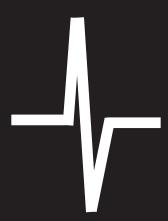
PULS E Lewis Katz School of Medicine at Temple University SPRING 2017





Welcome to The Pulse, the literary magazine for the Lewis Katz School of Medicine at Temple University. The Pulse is a student-run publication featuring poetry, prose, and artwork by medical students, faculty, and members of the community. Our mission is to promote humanism in its various forms and to create an environment in which creativity in medicine is celebrated and shared. This edition marks the return of The Pulse after several years' hiatus. It is the result of a joint initiative between the LKSOM Student Arts. Group and four members of the Class of 2017, who undertook this project as inductees to the Gold Humanism Honor Society.

This year, our magazine features two new initiatives. The first is a series of vignettes entitled "Neighbors of North Philly," a project which emerged from the school's new Narrative Medicine elective led by Mike Vitez. These candid photographs and stories celebrate the vibrant neighborhoods and community around Temple.

The second feature is a series of reflective essays from medical students in different stages of training. Every year, students in their preclinical and clinical years at LKSOM are asked to write brief reflections about their clinical experiences. The vast majority of these works, which by our reckoning number over a thousand per year, are read by the student's preceptor and no one else. Until recently, there have been few opportunities for this writing to be shared with the wider world. In publishing a selection of these reflections, we have tried to provide that opportunity, and to open a window into the process of becoming a physician.

As always, we welcome you to explore and share!

The Pulse Team

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POE TRY

GREEN MAN

Molly Kastner, MS I

I was an engineer.

I might have enjoyed the precision of it, the slim half moon of steel,

the utility of the task.

The exquisite function of the intercostals and the words you used to describe them: Hands in pockets

The motion of the handle of a bucket.

You don't know if I was the kind of engineer who builds bridges

or houses. A workman, or a dreamer.

Did I like order and lines and the beauty of numbers? Or did I dream dangerously,

of minarets and domes, or

of clouds with their surface like whipped topping?

But you do know the heart of it. How it ended.

The offense to my body, to order, to use. The annealing of arteries to veins,

the marriage of kidney to spleen. Complex anastamoses, collateral pathways, little highways with bridges and tolls,

destroyed by a force that hates order, knows only greed

and want.

You know that I hated the waste of a beautiful machine.

And here you are.
Uncovering me.
Peeling away the cancer that bound me together in the end.

MORNING COMMUTE

Matthew Trifan, MS4

... the sick are waiting, and there without grace go I, a sluggish savior gliding down a tunnel of melted light, trapped in a fevered dream of rusted tracks and the long runnings of old steel beasts, their staggering, screaming, swaying carapaces bearing blissful souls to prosperous lands far, far, far from here, spilling behind them afterquakes of sickly orange light, shadows dancing on the cobbled streets beneath, and in those shadows I am half-awake, I am half-alive, with belly full of charcoal sludge and slitted eyes throbbing with sleep, and every sinew of my body yearning for the rockabye sway of the shores of slumber, that soft lingering touch in this warm leather womb, this sleepdead soldier ensconced in his impervious capsule of metal and fury, the steady purr of rotor song carrying me on and on down this darkened highway, serenaded by saintly notes from hidden alcoves, strumming the haunting melody of an old desert place, warm smell of calitas, pink champagne on ice, and the grinning nightman whispering Relax, and here I am the quiet traveler, Relaxed, forlorn in an foreign world, like a spaceman of the ethereal creeping across the darkside of the moon, hidden and hushed from the glimmer of heavenly bodies and the burning face of god, and I think to myself I am the last man alive, whose soul is out of time, who belongs precisely not here in the underbelly of the city, not beneath the quaking rails and the drug pushers and the criers, but somewhere else, somewhere far away from the delirium king, from the countless living-dead with ink-marred veins and their syringes lying like shattered swords at their feet, shuffling away from the light, retreating from Dawn to their littered favelas, an entire city of decrepit churches and desolate banks and cardboard dens concealed from my mechanical carriage, galloping down the road with tires crunching broken glass, careening around small shelves of granite where tiny tectonic plates crashed together eons ago, bearing my body past the

empty parklands, the half-empty bins impaled with needles, where children laugh and play in the daytime, and on past the shuttered shops and shuttered faces of the sleepless skeletons of skag, and on past the Mexican church with the prison-barred windows and steel-gated door, and on past the industrial wasteland, the bottling factories, the aluminum plant whose dying work feeds a solitary plume of light, encircled by the shadows of men lost in their own fevered dreams, all come and gone in the blink of an eye, so too the city and the tracks, and this slumbered journey brings me to a half-empty lot at the end of the line, where my motor falls silent, the world itself ceases to breathe, and in this guiescent solitude I crawl out of my cocoon and stand shivering in the icy dawn, squinting against the rosy glint of morning, the fresh sun seeping through the rusted chain-link fence, its barbed-wire hooks raised like thorns in the sky, and my arms slip deep into their old threadbare coat, and my heart grimaces against the wintered dawn, and my head lifts high on streaming tendrils of frost, and my eyes rise up, up, up to the windows above, and I know deep in my bones, I know well and true that within those hallowed halls...

COMFORT IN SILENCE

Tyler Rainer, MS4

I became accustomed to stopping in doorways of rooms filled with shadows. Prepared for collecting stories and recognizing patterns.

I was not at all prepared for you.

You came to me without words, without comprehension, and so without fear.

I like to think I'm remembering you but what I remember is the shape of your body.

The shape you took on as all forty seven years of you rolled up in your mother's arms. The sharp angles of your legs propped up beneath you. Your shoulders harshly poking out from a hospital gown.

Each day you smiled a full grin from a half limp face. You searched frantically for the response to our tests "Hold up one finger." You held up two, sometimes one filling your family filling us with false hopes. We communicated only with our eyes, quiet a dance of gazes and glances. Sometimes tears welled up behind ours, streamed down childish cheeks, splashed comfortably in company.

I like to think I'm understanding you but what I understand best is my own helplessness in witnessing your deterioration.

I remember thinking this silence would never resolve even when you're gone. That in the absence of sound I would be brought to you.

And now that you are gone it remains still between us. It knows no other home; It comforts no other souls.

MENTAL

Heather Kagan, MS3

I take the subway to the seedy part of town.

The one in all the drug documentaries.

The station is painted sky blue and it feels forced. Like it woke up this morning, sniffed itself, grimaced, didn't shower, and covered up with cheap perfume. The flash of my alma mater's familiar color, for the first time, is not comforting. I am alone. Men as weary as the station loiter outside.

I walk a block. An ominous, tall, spikey fence surrounds the hospital compound and matches a gothic tower. Broken glass and litter-cover streets and parking lots. I feel small. I feel powerless.

The sound of an electric door buzzing me in. The stuff I have only heard in *Law & Order* episodes when the detectives go to Riker's Island. Like Pavlov's dog, I react with a shudder.

I walk inside and step into the corridor. The hum of voices is remarkable. A million faces talking. Speech so urgent that you'd think it came from a dying breath.

"Doc! Doc!" I hear called out. Someone is trying to get my attention. I realize the symbol of my white coat. I realize its power. I feel guilty for them not knowing it's short, which means I'm not a real doctor.

Emotions flood me and I don't know which one to feel first.

I wonder, is this what mental illness feels like all the time?



Katherine Donches, MS3

To him, I'm Doctor Taylor Swift To her, a suspicious banker To some patients who float adrift My familiar face is an anchor.

To him, I'm part of a conspiracy
To her, I'm comforting and warm
To some I'm just another ship at sea
Lost in their emotional storm.

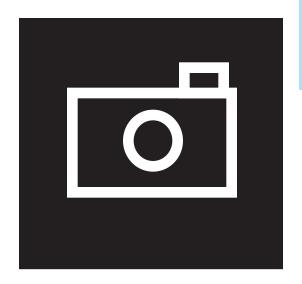
To him, I'm "bright eyes Miss Kate"
To her, I'm someone from long ago
To some I'm the harbor that waits
For others I am the rocks below.

THORACOTOMY

Tammy Lin, MS4

Hands like a clamshell
Massaging an empty heart
Flap, flap.
Past loves that once filled this heart:
Angela from two doors down,
who gave him
Baby Diamond with her powdery
newborn fragrance
The feeling of wind on his face,
crispy jets of speed as he flew,
down Broad St. on his ATV.

Spilling out of holes in both ventricles Gush, gush.
And then it stopped.
The squeeze of a heart devoid of blood Call it
Everyone out, med student in
Sewing up what remains
Sweat beading down her brow as she
Thinks of Angela, Diamond,
and the wind.



PHOTOGRAPHY

Neighbors of North Philly is a project which emerged from one of the school's new medical humanities electives led by Director of Narrative Medicine Michael Vitez and photojournalist Michael Perez. The aim of the project was to see North Philadelphia through a new lens by speaking with and photographing individuals living near the school, the very people who may one day become our patients.

Stories and photos by Mary Helen Schwartz, Johanna Lou, Danielle Hu, Carlie Rose Wilson, Kwan-Keat Ang, and Mary Fullington.

Stories and photos have been edited for The Pulse.

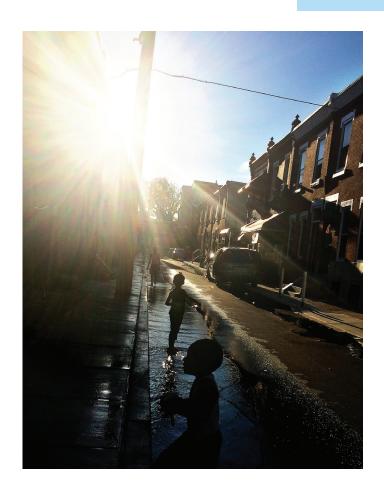


CYCLIST

Wayne, 66, drinks ginger honey tea and does a 30-minute headstand every morning. A cyclist for 25 years, he recently biked to Atlantic City and back. Wayne has been volunteering at Temple Hospital for so long that his ID card is faded. What he has seen has made him passionate about taking care of himself. "Your body is the temple," he says, "and you gotta treat it real good."

HYDRANT

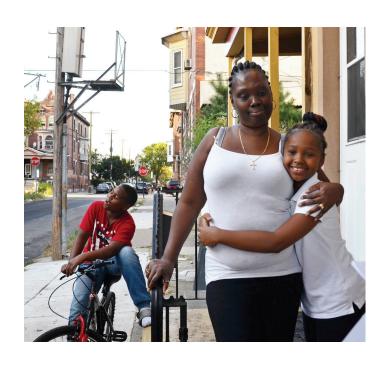
Ashon watches his girlfriend's children as they play on the street on a hot summer day. An open hydrant has turned the sidewalk into a water park, and the kids run up and down the street squealing. Ashon kicks back with a cold beverage in his van. Nicknamed "Dr. Feel Good," he explains: "Feeling bad ain't so good."





WHEELIE BOY

Carl, 12, practices wheelies on his cousin's pink stingray bike. He dreams of playing in the NBA with Lebron James someday. Until then, his aunt wants him to be a little more careful on the street. "He's supposed to be wearing a helmet, knee pads, elbow pads, everything," she says.



THE MATRIARCH

Melanie, 5 I, is known on the street for her cooking, particularly her cornbread. When she isn't in the kitchen, she is working as a corrections officer. She says the job has helped her keep her 8 children and I I grandchildren out of trouble." If you can't listen to your mom, don't wind up in prison," she tells her kids. "Because then you'll have to listen to me all day long. Sit. Stand. Eat. Wait. Stop."

ICE CREAM

"I cried all the time," says Linese, who was diagnosed with Lupus in 2005. "I'd watch my kids sleeping at night. They didn't think I would live five years. Now, it's 11 years later." She licks her ice cream cone with her 13 year old son, John, and smiles.





PROUD PAPA

Gary loves his daughter Cattelaya Summer. She is a twin, two minutes older than her brother. She was born at Temple Hospital during—you guessed it—the summertime. Gary has five other children and says they all use the medical school as a landmark. "Once they see the T, they know they home."



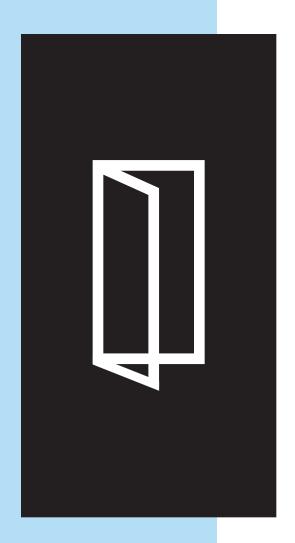
BIG HEART

"I want to go to law school and become a public defender," says Darnell, 26, as he walks his son home from school. "There are a lot of disparities in the law. We need people from the community to defend the community. And what the community needs most is unity." He points to his heart. "Once it's easy in here, it's easy everywhere."

SANITATION MAN

Herman is retiring in two weeks, and he plans on getting out of town. "I don't know where yet," he says, "but I'm gonna get out of here." He has lived in this neighborhood for 37 years, and he doesn't like the way things are headed. "These houses used to be nice," he recounts. "There were flowers, people around on their porches. Now there are kids shooting up drugs, getting into trouble. You see them around with \$200-\$300 sneakers. They need to stay in school and learn what a dollar means."





REFLECTIONS

FAMILY

Ayanna Gouch, MS4

When I walk into a patient room, I adjust my collar, clear my throat, fix my mouth for a smile and hope for the best. Much like I approach entering any room but with more focus and intentionality. Sometimes, I'm greeted with a smile, sometimes not. It doesn't really matter to me either way, as long as they're smiling by the time I leave.

When I look into the eyes of my elderly patients, I see the eyes of my grandmothers.

My favorite rooms to enter are those with elderly women, who remind me of my grandmothers, both of whom passed away when I was very young. I can't remember their words of wisdom or the smell of their holiday meals or the warmth of their hands. I have many, many stories to remember them by, but these patients give me a chance to talk to them in some unorthodox way.

When I look into the eyes of my elderly patients, I see the eyes of my grandmothers. When I observe the defiance and sass of these older women, it reminds me of the resilience of my grandmothers. This relationality is not often discussed in medicine but I think it is an important concept to explore. If I see every patient as a theoretical extension of my family, then I will treat every patient as if they are a member of my family.

I especially love when these women say, "Oh, you remind me so much of my grand-daughter!" This truly makes my day because it means they see me as a potential extension of their family as well. These encounters remind me that we are reflections of one another. Whether grandmother or granddaughter, medical student or patient, we all have the power to remind each other of our humanity.

WHO CRIED FOR YOU?

Madeline Lederer, MS I

When I look at you, I see him. You are the second dead body I have seen in my life. Before you, I saw him lying in a casket a year ago. Neil died early in the morning after the Fourth of July. I'm not sure how you, my cadaver, died, although I know you had Alzheimer's. Neil was crossing the street late at night when a police officer speeding without lights hit him and killed him instantly. You are much older; he was 25, and you were 91. You were a social worker, so I imagine you were caring and generous. After all, you donated your body to inexperienced, scared medical students. Neil was also caring, and so smart. He would have gone on to get his PhD in physics, or engineering; he would have finished building his confocal microscope. I met him when I was the physics tutor for his class, but it was quickly clear that he was much better at physics than I was. I imagine that you were brave, because I know from your muscles that you were physically strong, and

I remember how brave he was when I called him to kill the centipedes in my dorm room.

Seeing him in you is hard. Your hands are like his. Pale, cold, with stitches all over them. We open up your stitches to look inside, but his stitches were put there to hide his injuries. Yours are very visible with white, thick string, and his were so badly covered by makeup. I blamed some incompetent medical examiner for his rough and tasteless handiwork, but now I realize we medical students are just as rough with your corpse.

As we study your abdomen and remove fat and fascia, I focus on exactly what we are working on. That way, I don't have to think about what his abdomen probably looked like. You come to us clean, and sterile, with perfect organs, but I know his organs must have reflected the trauma of his accident. After weeks of dissection, we clumsily pack your intestines back into your abdominal cavity and put your ribcage back in place; now

your state and his are not so different.

When we finally reveal your face from beneath its protective cloth and look into your eyes, I am queasy for the first time. Was the cloth there to preserve your features or to protect us from your humanity?

The only parts of your being that I understand are embedded in your genes and manifested in your anatomy.

I thought your eyes would be closed like his, but blue irises stare back at me through cloudy lenses. I don't remember what color eyes he had. Removing the skin from your cheeks sends me reeling inside again, because I can picture the stitches down his nose and across his cheek. Neither your face nor his show any emotion, though I repeatedly look for some sign that you are at peace. I knew him. I knew his name, and I knew his laugh, and I remember the pain of his death. I will never know these things

about you. The only parts of your being that I understand are embedded in your genes and manifested in your anatomy. Did your family and friends get to see you in a casket and say goodbye? Who cried for you, and who smiles at your memory?

On the last day of dissection, when I was finally able to stop seeing you, I was happy. By the end, you stopped reminding me of him, and you stopped looking like yourself. Our dissection took your humanity and left a mangled mess of indistinguishable body parts. Still, you will always haunt me, and the image of your head split in half will remain with me forever. He will always haunt me, too. I can't carry every death with me, but I will carry yours and his.

WHERE THE CLASSROOM MEETS THE CLINIC

Danielle Verghese, MS2

She was the worst patient in our study. Temperamental, demanding, an inveterate absconder, she turned our straightforward clinical trial into an exercise in patience. This was the third time she had cancelled an appointment at the last minute, and my partner and I had all but given up on her. Mind you, our study was filled with patients who had signed up to participate at their regular check-up, only to later dodge our calls when we tried to follow up.

She was the worst patient in our study.

All of these absences were starting to impair the quality of our study, so we instituted a new policy of weekly calls, in the vain hope that we could keep our patients from crossing into the shadowy realm of "no show." In keeping with this policy, I called the aforementioned absentee patient and scheduled yet another visit, all the while resigning

myself to the likelihood that she wouldn't show up that day.

Surprisingly enough, she did show up to her appointment this time (fourth time's the charm?), but her arrival didn't make me feel much better about our prospects. "If I had known y'all would make me come out here for an hour and a half," she said angrily, "I wouldn't have signed up for this study." We gently reminded her that we had made that point clear when we first consented her for the study and during every follow up call after. Nevertheless, I put on my best smile and tried to remind myself that I was speaking to a person with her own struggles, not just a difficult patient.

Knowing that her bloodwork would take a while, and that the patient might be inclined to walk out at any moment, I tried to distract her with a steady stream of small talk.

Our conversation eventually transitioned to stories from her childhood—how she married her childhood sweetheart, and the lifetime of challenges they

Ultimately, we have to remember that a diagnosis may call upon our scientific knowledge, but real treatment demands our humanity.

overcame together. Suddenly, I was no longer trying to see the person within the patient, but actually seeing her, learning about her, and identifying with her struggles. At some level, I suppose she recognized this change in me and began warming up to me. During our conversation, she sighed deeply and said, "You know, I'm sorry for the way I've been talking lately. They've got me on these pills, and they just make me so damn sleepy. And my husband can tell you, I get cranky when I'm sleepy." I assured her it was okay, and that I'm all too familiar with how grumpy my sister gets when she's sleepy, which brought a smile to her face.

"You know, I really am gonna try and make it through this study," she told me. "I know I complain a lot, but this is something I gotta do for my diabetes, and y'all are just trying to help me with that."

This is a message we've heard time and time again, but it bears repeating: brevity is a necessary part of medicine, but not at the cost of the patient. Whether we're focusing on high yield material to prep for our board exams, or narrowing our interviews to focus on our differential diagnosis, we are constantly cutting out the larger details. It's important that we don't cut out the human being with the rest of those details. Ultimately, we have to remember that a diagnosis may call upon our scientific knowledge, but real treatment demands our humanity.

A YOUNG DOCTOR'S LAUGHTER

Desiree Clement, MS3

That morning, we got the page.

Ms. B had stopped breathing, the nurse said over the phone, loud enough for me to hear. Please come quickly.

My intern and I started walking over to Ms. B's room. Along the way, we were joined by a fourth year medical student and another intern. The two doctors joked with each other as we walked, one ribbing the other that his patient stats were going to look terrible — this was the second one to die on him this week.

"You're going to get a reputation!" the first intern joked.

"Hey, an intern's job is to discharge patients. One way or another, they're leaving!" the other replied.

The intern taking care of Ms. B checked in with the nurse, who confirmed that she had stopped breathing and that her family was there, wanting a doctor to check on her.

I followed my intern into the room, where he asked the family what had happened. I remember the patient's husband standing by the bed, looking stricken,

as his son and daughter explained that Ms. B had stopped breathing. The intern asked them if they could leave the room while we examined her. They filed out, the son and daughter supporting their father as he shuffled slowly out of the room.

The two doctors joked with each other as we walked, one ribbing the other that his patient stats were going to look terrible – this was the second one to die on him this week.

Once they were gone and the intern shut the door, he taught us how to "declare" someone dead. We checked for pupillary and corneal reflexes. He and another fourth-year student carefully listened for heart sounds, laughing nervously when the fourth year said she thought she heard something — which turned out to be her finger rubbing against the bell of her stethoscope. Sternal rubbing and pinching elicited no reaction. Ms. B was well and truly

dead.

The three of us stepped into the hallway where her husband and children were waiting. As the intern quietly told them, "I'm sorry, she is gone," the husband sagged against the wall, his daughter quickly grabbing him and pulling him in, hugging him and keeping him upright. He stood there with her for a few seconds, and then pushed her away, shuffling back into the room with tears streaming down his face. He went up to the bed. He told Ms. B that he was sorry. that he just wanted more time with her but it's OK that she had to go. Their children hugged each other silently.

He told Ms. B that he was sorry, that he just wanted more time with her, but it's OK that she had to go.

The intern told the family to take as long as they needed, and our team left, carefully shutting the door behind us. The two interns sat together at the nurses' station down the hall, as the one filled out the death certificate and the other worked on orders

on the computer. Soon they were laughing loudly, still ribbing each other about death statistics and patient "discharges."

I stood there, feeling more and more uncomfortable, wishing that the intern would finish with the certificate and move on; hoping that Ms. B's family wouldn't come back out into the hallway looking for help and overhear their young doctor's laughter:

UNFILTERED

Christopher Fragassi, MS3

What surprised me most about the psychiatry service was how open the patients were with me. Their willingness to discuss personal issues freely led me to reflect on my own life outside the hospital. I realized that we live in a world where a large part of our social interactions are really a façade. A large part of this is our perception through the internet. People live through their social media accounts and only present the side of themselves that they want others to see.

... we live in a world where a large part of our social interactions are really a façade.

The growth of social media has created a society where all are screaming "notice me" at the top of their lungs, but no one is paying any real attention to anyone but themselves. It is as if we have developed such a need to have our thoughts validated, that

the open eyes and ears of internet strangers somehow provides the personal comfort we can't find in everyday life.

My first observation on the pysch floors of Episcopal Hospital was that these people are not living in that superficial world, at least not during their hospital stay. These people have come to, or been brought to, the hospital in their worst possible moment. Many have thoughts of hurting themselves; others have so many ideas racing through their minds that they cannot decipher their own train of thought. These patients are often hurting in ways that most people will never experience. It is in these moments of need that they are open and honest. When I sat down to ask a patient about their deepest thoughts and secrets, they would immediately be forthcoming. Just a simple "So, what's up?" would lead to a 20-minute monologue detailing a 40 year history of pain, sorrow, fear, and abuse. I do not know if it was my white coat, a parental relationship, or possiblwhere we spend 24 hours every day connected to strangers through the internet screaming "notice me" the people who are not noticed, who are left behind by society, have no more screaming left to do.

ly the manifestation of psychosis, but the way these patients were willing to give up information about not only their disease, but their lives, too, struck me as extremely courageous.

I guess that honesty is the only option they have. Sometimes these patients are in a place mentally where there are simply no more avenues to travel. Addictions are too strong, voices are too loud, or the will to live just isn't enough. So maybe the truth is all that is left. Maybe in a world where we spend 24 hours every day connected to strangers through the internet screaming "notice me" the people who are

not noticed, who are left behind by society, have no more screaming left to do. For them, saying, Hey, I need help, is the loudest sound that can be heard.

What we see at Episcopal is simply unfiltered and untouched. It has provided me an outlook on things that I do not think I, or many other people, have ever gotten to see. The perspective it has provided me with has been a blessing. From now on, I will have to take an extra second to reflect before I post that Friday night Facebook picture with the guys, and wonder if I am being myself, or if I am building up the façade we all create.



I am becoming the person I want to be when I grow up. I am becoming who I wished treated me in my various doctor's appointments. With it, I am more than my fears, my insecurities. I am balance, reason, empathy, safety for my vulnerable patients. But I am still becoming. I am still learning — learning that I will never be perfect, that I won't always be right. I am learning from my mistakes, my mentors, and my peers. I am becoming trustworthy to myself, my professional community, and those in my care.

The coat is the process, the hierarchy, the discipline. The coat is the privilege that I sometimes doubt I deserve. It is earned. In libraries, coffee shops, "the floors," and my community, I strive to keep it. But, as its edges wear and its pockets run with ink, so too am I transformed. It is becoming less and less a costume.

COFFEE BREAK

Meryl Ethridge, MS3

My last day of surgery happens to be my last 26-hour call shift with the trauma team. It begins as a calm day. We are eating lunch in the cafeteria and "running the list" when our pagers go off. We all look down and read, "GSW to the chest, Level I," so off we go. As we walk into the trauma bay, the patient begins to code. We dress quickly, and the surgery residents take over from the emergency team. It soon becomes apparent that a thoracotomy is going to be necessary as a last-ditch effort to save the patient. To be honest, I am pretty excited to witness one, since it is my last day on trauma and I had yet to see one. I stand behind the resident, close enough to see, but far enough away to ensure I am not in the way. The chest is opened and blood pours out onto the floor, more than anyone is expecting. The lungs are then pulled aside to get a clear view the heart. At this point, the attending steps in from the opposite side and begins to manually pump the heart with his hand, while ordering the residents to "find where the bleeding is coming from." They clip the hilum of the lung, which by now is completely deflated; once the pericardium is open, they begin to examine the heart from every angle. The heart is lifted up and the damage appears--a bullet went straight through the left atrium. The entire left atrium is torn open, which explains all of the blood pouring out earlier. Once the attending sees this, he despondently states, "Time of death: 12:49PM." I then move closer to the patient, where the attending is pointing out anatomy, and he invites me to hold the heart to see everything closely. When the teaching is done, the residents hand me sutures and I close the patient's chest. As we leave the trauma bay, the attending asks if we've had any lunch, and we decide to go back downstairs to the cafeteria to join him. Pretty soon we are back sitting at the same table as before, sipping coffee and talking about life.



ARTWORK



FLOWERS IN HER BRAIN Watercolor Tammy Lin, MS4

THE SPLENIC ARTERY IS MY FAVORITE ARTERY

Watercolor Tammy Lin, MS4





DonnieAcrylic on canvas *Regan Tuder, MS4*



JANEY Charcoal Regan Tuder, MS4

SMIRKING BUDDHA Oil on canvas Regan Tuder, MS4



MI Oil on canvas Regan Tuder, MS4





MEDICINAL GARDEN

Photograph Ayanna Gouch, MS4

HANDS Photograph Ayanna Gouch, MS4



CHAINED

Photograph
Tyler Rainer, MS4



FOR SALE
Photograph
Tyler Rainer, MS4





HEART STRINGSNeedle Point
Tammy Lin, MS4

BEST FRIENDS Black Ink Tammy Lin, MS4





PROSE

THE MAKING OF AN AMERICAN DOCTOR

Matthew Trifan, MS4

Not long ago, I was on duty as a medical student in a large urban Emergency Department, sewing up a boy's lacerated hand. He was ten years old and terrified, having split open his palm on a kitchen knife. I had to make all kinds of promises to numb him up before starting. As I cajoled him, I had the strangest sense of déjà vu. I realized that I had lived through the same experience myself—as a young boy sitting in my kitchen with a torn up hand, having careened on roller-skates into a pile of rocks. Only the doctor had been my father, and he had coaxed and pleaded with me just like I was doing now. I remember the burn of the lidocaine, and then being mesmerized by my father's deft weaving of knots. Now here I was, spinning the same knots, singing the same song, soon to be a doctor myself. Just like that, our lives had swung full circle. The torch had passed on.

In truth, I find myself thinking about my family a lot these days. And for good reason. My journey to becoming a physician really started with their own.

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My parents' story begins some fifty years ago in Romania, a beautiful country nestled in Eastern Europe's Carpathian Mountains. In the 1950s, Romania was yet another country yoked to the Soviet empire, one of many bearing the Communist flag. My mother was born a city girl in the capital of Bucharest. My father was raised in the rural Transylvanian town of Brasov. Despite their disparate upbringings, both of my parents grew up in the early seventies with a love for all things American. They jammed out to black-market records in their rooms, from CCR, to Pink Floyd, to Jimi Hendrix and Fleetwood Mac. They wore "blue jeans" out in public. They indulged in the rare Pepsi-Vodka at the discotheque. Everything American was edgy, rich, and cool, and more importantly, subversive to the Communists stiffs who ran the country.

What little they actually knew about American life came from books and movies smuggled into Romania. My parents learned about Western culture from films on the "black market." These movies were bootlegged and watched secretly with neighbors and friends in living rooms at night. My mother loved the forbidden love saga of Natalie Wood and Warren Beatty in "Splendor in the Grass." My father was particular to gangster movies and hardboiled crime noirs like "The French Connection." The movie heroes did what they wanted and said what they wanted, wherever and whenever they wanted. "We couldn't believe how bold they were," my mother recounts. "We couldn't get enough of it."

It wasn't until the end of the Seventies, when the privations of the Cold War began to strangle the Romanian people—when food shortages and crackdowns on political dissent became commonplace, and there were long waiting lines for everything—that the dream of reaching America became a desperate plan for escape. My mother would wait three hours in line to buy butter; my father did the same for toilet paper. It was no longer easy to laugh off "incompetent" government bureaucrats—not when you couldn't put food on the table, or get petrol for your car, or find a steady job. More and more Romanians were spying on each other, acting as informants at home, in school, in churches, and even in hospitals. Daily interactions became hostile, suspicious, and dangerous. Some citizens tried to emigrate westward, but even this became difficult. Obtaining travel papers was increasingly onerous, sometimes taking months or years to complete. If someone was lucky enough to travel abroad, his family might be forced to remain in Romania, to reduce the risk of defection. The country was turning into a prison.

My grandfather was the first in my family to leave Romania, although his journey was far from simple. In the late 1950s, he had made a careless toast at a dinner party--saluting the "Hungarian Revolution" against the Communist rulers—and an informant had reported him to the police. Thus, my grandfather, a surgeon by training, received a ten-year sentence as a political dissenter in a laboring gulag. This was the type of sentence that often meant death

from malnourishment, guard brutality, or disease. Luckily, his medical knowledge proved to be an asset in prison. Because the nearest hospital was six hours away, the guards came to depend on him for his medical expertise.

My grandfather had been prisoner for about five years when the prison warden approached him one night in a state of panic. The warden's wife had had a tubal pregnancy, which had ruptured. She was hemorrhaging blood and would not survive the journey to the hospital. "Do everything you can to save her life," the warden begged him. Without hesitating, my grandfather pillaged the jail's shoe-repair shop for cutting instruments and thread. He boiled the instruments to sterilize them. Then he operated on the warden's wife. He stabilized her bleeding, and she was able to reach the hospital. In gratitude for saving her life, the prison warden commuted the remaining sentence. My grandfather emerged from the gulag in 1963 with a clean slate to practice medicine freely. He resumed his career as a surgeon. But he would never forgive the State for robbing him of his children's earliest years. My father was seven years old when my grandfather finally came home.

Thus, in 1978—fed up with being spied on, underpaid, and overworked—my grandfather obtained travel papers to America. He was the first of his family to leave Romania, under the guise of visiting relatives in Ohio. Upon arriving in America, he applied for political asylum. The US government reviewed his history and granted his request. But there was a steep price for admission. Because of his poor English and lack of an American degree, he would never practice as a surgeon again. Until the end of his career, he would work as an OR technician in Ohio, relegated to fetching instruments and assisting surgeons from the sidelines. However, he took comfort in his medical expertise, which won the respect of his colleagues, but more importantly, in his job, which allowed him to host his family from Romania. By using a Romanian emigration law known as "family reunion," my grandmother and my aunt were able to join him in the United States a few years later.

Now there was only the issue of my father. In 1981, at age 25, my father was the last of his family left in Romania. He had his heart set on America, but leaving would not be easy for him. He was madly in love with the woman who would become my mother, but she had her own career and family in Romania. He had met her during his mandatory service in the Romanian army after high school. She was the sister of his best friend in the army. One rainy Sunday afternoon, she had come to visit her brother at the military camp, and my father had trudged along to say hello. The moment he saw her, he was thunderstruck. She was dating another man at that time, but that did not deter my father. He was dogged in his courtship, catching weekend trains to visit her in Bucharest, and writing long letters to her, dozens of pages at a time. Every night, after marches and drilling, he dreamt up a life for them together on ink-blotted pages.

By 1981, my parents were happily married and miserably broke. My father had finished medical school in Bucharest. Despite his budding career, he had his eyes set on America. During the next two years, the Romanian economy continued to crash, and my parents decided it was time to leave. They began lobbying government officials for travel papers. Strings were pulled. Favors were called in. It was a long and expensive process, lasting a full year. Eventually they got their wish in the form of a travel passport abroad via Italy. There was no time to waste. My parents packed lightly and gathered what little money they could. They were permitted two suitcases each and \$50 per person for travel expenses.

Their journey was harrowing. My father was convinced they would be stopped by the secret police at the airport. "When your mother and I were walking to that plane, I expected a hand on my shoulder," he said. "I was waiting to hear a friendly voice saying, Tovaras (Comrade), where are you going so quickly?" Their sense of dread followed them into the plane, where they sat sweating in their seats. Ominous clouds darkened the skies. The plane sped down the runway and ascended in the midst of a terrible storm. "It was as if God himself was denying us passage out of hell," my father said. Ferocious wind ripped at the plane. They held each other's hands.

The dingy aircraft rattled its way to Albania, where it stopped for refueling. The passengers waited inside a tiny airport during the storm. Through a huge window, they could see a dozen giant tanks parked along the darkened runway. The mammoth turrets were pointed directly at them. They waited for hours in the airport with their hearts thundering.

The plane was refueled, and a few hours later my parents arrived in Rome. They bought Italian gelato from the nearest vendor and sat down on the sidewalk. They held hands. With the warm sun beating on their necks, they wept.

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It would take nearly a month for the American embassy in Rome to grant them entry visas. In the interim, my parents, then ages 28 and 30, received \$200 from my grandparents in America. The money allowed them to travel to the island of Capri off the gulf of Naples, and then to Florence. This was their impromptu honeymoon of sorts-their first true taste of love in the free world.

In the spring of 1984, my parents landed at JFK International Airport in New York City. They had made it to the Land of the Free—only to find a fresh set of hardships. They were broke, with less than a hundred dollars between them. Although my mother was fluent in English, my father spoke miserably little of it. My mother began work as a bank teller for Citibank for \$800 per month. My father discovered that his eight years of medical training in Bucharest held no weight whatsoever in America. He would need to apply to residencies without a formal US medical degree—and with minimal English to boot! His applications were rejected by nearly thirty residencies in the region. On the phone, he was bluntly informed "We do not take foreign graduates." He was dejected. No longer the bread-winner, he sat alone in the apartment most hours of the day, confronting the choices he had made.

He caught a break through a fellow Romanian in New York. My father was offered a "voluntary internship" at a New York hospital for a year, unsalaried, as a "trial" for residency. His English was rudimentary, meaning he would have to learn the language as he went along. And he did. He impressed his fellow residents and physicians with his acumen and astute physical exams. He could diagnose pneumonia almost exclusively from pulmonary percussion—at a time when his colleagues were mostly relying on radiographic imaging. He likewise dumbfounded an infectious disease specialist by diagnosing tuberculosis by stethoscope alone. Half a year later, my father was offered an official residency position at the hospital. He had made it in America.

With a residency secured, my father and mother felt it was time to begin a family. My older brother was born in 1987. I was born in 1989, the year the Berlin Wall fell. It was also the year that the Communist regimes of Eastern Europe began toppling like dominos. On December 25th, 1989, the former Communist dictator of Romania, Nicolae Ceauşescu, and his wife Elena, were dragged before a kangaroo court and charged with genocide. My parents watched dumbfounded as the proceedings unfolded on television. The Ceauşescus were found guilty and sentenced to death by firing squad. They were taken behind the courthouse and lined against a wall—like so many of their victims before them—and shot to death. "Our whole lives they were untouchable," my mother recounts. "Then, poof, just like that, they were gone."

A new era was dawning in Romania—and in my parents' lives too. In the early 1990s, our family moved to central Pennsylvania, into a house with a spacious yard in a quiet neighborhood. My father began working for the Veterans Hospital in Altoona—proudly caring for veterans for the next twenty-five years. My mother devoted herself diligently to raising my brother and myself as typical American kids. She drove us to school meetings and tennis matches and karate classes. She helped with sleepovers and birthday parties and prom suit shopping. Most importantly, she taught us the value of a dollar hard-earned, which she had come to truly understand during her life.

Today, my brother is working as a hospitalist in Pittsburgh. My father is approaching retirement and looking forward to the most American of pastimes: golfing. My mother travels yearly to Romania to visit old friends. Before passing away ten years ago, my grandfather was also able to return to the country of his birth—this time, as a free American citizen.

Now I am nearing the end of my own eight-year journey through college and medical school. Residency looms ahead, and I find myself standing on the precipice of an unknown future, just like my parents and grandparents did before me. Their journey gives me strength. If they could start over, I know that I can too.

So here I sit, sewing up a young boy's hand, feeling the pinch and the pull in my own, hearing my father's voice in my head, echoing the past. My patient has calmed down. He watches me with trustful eyes. I draw each circle tightly closed, lending the wound a little more strength, before my needle travels on.

STARVING

Kristen Weiner, MS I

I always wanted to fit in, which means I always wanted to be thin. I recognized that Hollister and Abercrombie clothes didn't look the same on me as they did on my friends. As a teenager with relatively unrestricted access to the internet and television, I knew what I needed to do: diet. I tried that many times, but always gave in and continued my grazing and (what I thought was) overeating.

Then, in February of 2010, during my junior year in high school, I went to visit my grandparents for spring break. I remember sitting on that JetBlue flight to West Palm Beach, Florida, and pulling out my iPod touch. I opened the "notes" app and started writing a 2-a-day exercise plan, as well as foods to avoid. For some reason that was the note that changed everything. The goal was to lose weight, and anything that would get me there was no longer a choice, but rather became mandatory.

I lost 45 pounds in 3 months.

Weighing under I 00 pounds, I was cold all the time. I would wear leggings underneath my jeans just to keep warm in school. Everyone around me was in shorts and tank tops, while I was shivering in my jeans and sweatshirt. I would feel my bones every time I got out of the shower, just to make sure they were still palpable. If I could see them, even better. When I turned on my side to go to sleep at night, the bones in my knees would grind against one another--and to me, the pain felt good. It felt good because it felt like success, like I had gone another day eating less than I did the day before. Complete helplessness never felt quite as powerful as it did then. My fear of gaining weight was avoided, but not confronted.

I lied endlessly, always to tell people that I'd eaten when I hadn't, that I wasn't hungry when I was, that I was going to go shopping when I was really going to the gym. I have always been able to read 50

people, to anticipate their emotions and reactions and act accordingly. That's what made me such an eerily good liar.

Anorexia tore me away from my family and my friends. My mom sat me down at the kitchen table one evening, sobbing as she touched my bony hands. She desperately asked me to stop doing this, because I was literally disappearing before her eyes. I tried to look like I was listening, but all I could think about was how I could sneak away and go for a run.

On March 25th of 2011, I wrote in my diary: How do you heal from this? Will it always hang over me and squeeze my brain like a giant hand squeezing a stress ball? I feel free and trapped at the same time. I feel like anorexia gives my life meaning, it makes each day a challenge that entertains me. But in reality, it is preventing me from moving on and actually facing the real challenges I crave. I want to be a working woman with ambition and pride.

Shortly after that journal entry, my mom presented me with an ultimatum: recover and go to college, or continue doing this, wind up in treatment and put my life on hold indefinitely. I knew what I had to do, but I so desperately didn't want to do it. I didn't want to give up control. But lo and behold, I slowly gained the weight back. It felt so quick, though--so unbelievably uncomfortable. Choosing myself, choosing health, was the first step I took in recovering. At a critical stage in my life, I realized that going into medicine and helping others would be impossible if I could not help myself.

Recovering from an eating disorder is not a one-time decision. Even now, 7 years later, recovery is a choice that I make every day, and some days are harder than others. Thankfully, this disorder that used to dictate my life no longer calls the shots, but that doesn't mean I don't still struggle. For a long time, I was ashamed of this part of me, of this important chapter of my life.

To continually make the decision to keep fighting and keep working towards something better is something I'll be doing my entire

career. When I graduate from medical school, I won't know everything, or even close to it. But I think that's the point. I think that I think that being a physician is a constant pursuit of refining your skills and learning how to help patients in ways you might not have foreseen.

I believe that the progress of medicine relies on the idea that nothing truly is certain. Being afraid of failing but persisting anyway is how any progress happens. I wouldn't be who I am without my past, without that fear of the unknown and the drastic measures I took to avoid it. But choosing to endure in the face of that uncertainty, that shred of doubt--choosing to fight against that fear--that's what I'll use to save lives. Because that's what saved mine.

A DOCTOR-IN-TRAINING LEARNS BEDSIDE MANNERS, THE HARD WAY

Michael Rockman, MSI

The 16-inch metal rod in my leg and the seven-inch surgical scar descending down my abdomen remind me daily of how much has changed in my life in the last year. But it wasn't until last month, when I returned to medical school and the anatomy lab, that how fortunate I truly am started to sink in.

Like all medical students, I spend a lot of time getting to know human anatomy both through books and by dissecting a cadaver. One day, early this semester, I reached into the cadaver's pelvis and grasped the iliac artery, as thick as a taproot, carrying blood from the heart to vital organs such as the bladder and the muscles of the backside. I held it in awe. This is one of the arteries that I ruptured in my own pelvis, less than a year ago.

Another day, I explored how several muscles converged to attach on the cadaver's upper leg. Then I felt my own hip, and noticed differences with these muscles in my own still-healing body. "Wow, no wonder it still hurts," I thought, reflecting on the pain I feel when I stand too long.

When I started medical school in August 2015, I felt overwhelmed from the first day. The number of muscles, bones, nerves, arteries, and veins that I needed to memorize seemed, well, inhuman. Who knew there were 27 bones in each hand?

After bombing the first exam, I doubled down on studying and did well on the second test about six weeks later. After studying during all of the next Saturday, I felt comfortable enough to take a late-afternoon break to drive to visit my girlfriend, a senior at my alma mater, Lafayette College, about an hour from Temple's campus in North Philadelphia.

But I never got there. As I was making a left turn from a stop sign onto Route 309, a car slammed into my driver's side door at 55 mph.

Four days later, I woke up in the ICU at Lehigh Valley Hospital with I was told that I nearly died and needed two operations in the first 24 hours to stop internal bleeding and to repair multiple pelvic fractures and a broken femur.

When I came out of my induced coma, I was attached to a ventilator with a breathing tube down my throat and a cervical collar on my neck. I could neither speak nor turn my head. I was so grateful to see my parents, who had driven overnight from North Carolina, at my bedside, along with my girlfriend. This was the beginning of a new and unexpected part of my medical education, with lessons I believe will make me a better doctor.

First, I learned the power of reaching out to help someone in need. I was blown away by the love and support I received in visits, notes, and calls. Former professors, old college friends, new classmates I hardly knew, and friends and colleagues of my parents appeared at my bedside. Kind words, particularly from people I didn't even know very well, had a powerful and undeniable impact on my mindset and recovery. No matter how much pain I was in, I tried to act as if I felt better so that my visitors would feel comfortable sitting with me. After a while, I realized that doing this really made me feel better. I hope I'll always remember how helpless and alone a patient can feel - especially those without friends or family or family - and that the smallest kindness I can offer may make a big difference.

Second, I learned the value of teamwork in medicine in a way I'll never forget. One example is what happened when it came time to wean me off the ventilator. To prove I was strong enough to breathe on my own, I needed to breathe for 30 minutes with the tube still in, but with the machine turned off. Breathing through a ventilator tube feels like breathing through a straw, which was unbelievably hard for someone who hadn't used his breathing muscles for days.

The respiratory team was suddenly called away because a patient in the next room was in cardiac arrest. So there I was, breathing through the tube for more than an hour. I was dripping with sweat, and it took serious coaching from family and the excellent nurses who stepped in to keep me afloat until the respiratory experts returned. Seeing how the team all trusted each other and worked together, however, gave me the confidence I needed to get through.

The third major lesson came after I left the hospital. While recovering, I took multiple daily walks through the neighborhood with my grandfather, whose health was starting to deteriorate from lung cancer. A 22-year-old on crutches escorted around the block by an 88-year-old was quite the sight!

My grandfather and I enjoyed each other's company tremendously, and I listened to his wisdom more intently than ever before. One pearl: "Anything can be fixed after a few hours tinkering in my workshop" - in other words, keep on working to solve problems. Never give up.

My grandfather died a few months later. Now, a year after my accident, I am driven, in part by his memory, back to where I started, as a first-year medical student in anatomy.

Whether I'm sorting out tangled nerves in the neck that resemble spaghetti or discovering that veins feel so much softer than arteries, my perspective has been forever transformed. The smell of formaldehyde hasn't improved from last year, but my score on the first anatomy exam sure did!

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