

#### **Preface**

This volume of White Coat Central emerges from a year's worth of work during exceptionally difficult times. Medicine, the arts, and humanities grapple with core human concerns: life, death, illness, grief, hope, and change. Medicine, the arts, and humanities complement each other in the search for sense and meaning, or the representation of their absence. The contributors to this volume communicate through visual, voice, verse, and prose on a range of topics, about medicine, about themselves, and about being human. As faculty co-advisor, I am grateful to the Student Interest Group for their work on this volume and for seeing it to fruition, and I am grateful to you, the reader, for joining our community. Happy viewing, listening, reading, and being.

M. Ariel Cascio, Ph.D.

What makes humans different from other species of life? There are many differences, and one is surely the capacity to imagine and create. What makes a physician different from a doctor? I'm sure you won't find this in Webster's Dictionary, but my own interpretation is that a doctor represents a certain amount of higher education and technical expertise. Society recognizes such individuals, whether they be philosophers or engineers or scientists as doctors. Of note, as an example of reverse elitism, surgeons in the UK preferred to be addressed as Mr. or Ms. instead of doctor, due to the history of the origin of surgeons in the UK. As physicians, we need to treat the person and not just the blood pressure or an arterial block. We must be more than mere technicians, normalizing lab values and shrinking tumors.

The field of humanities integrated into our technical expertise will greatly help us become better physicians. Appreciation of art lets us recognize an individual's background, culture, interests and concerns which in turn helps us provide more holistic individualized care. Art, in all its forms, can be invigorating to reach our long-term goals and therapeutic as we navigate the joyous and the not-so joyous stresses of our lives as physicians.

Congratulations to our CMED students on their initiative in compiling a wonderful collection in this second edition of White Coat Central.

S. Sethu K. Reddy, MD



### **Table of Contents**

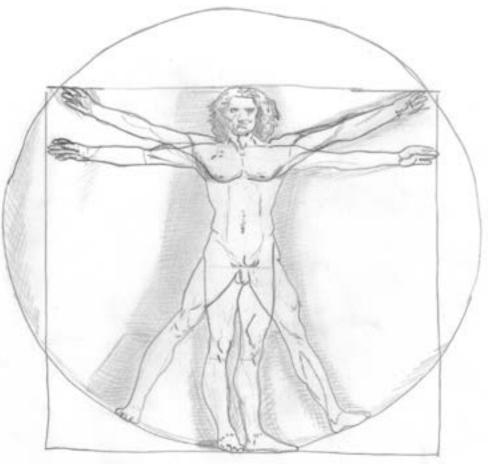
| Piece                     |                  | Author or Artist   | Editor                 |
|---------------------------|------------------|--------------------|------------------------|
|                           |                  |                    |                        |
| 1. Front Cover Photo      |                  | Maheen Akhter      |                        |
| 2. Selected Works and C   | Commentary       | Brenda Varriano    | Soundharya Subramaniam |
| 3. Untitled               |                  | Samantha Liu       |                        |
| 4. "The Giver"            |                  | Lane Stamp         |                        |
| 5. Untitled               |                  | Maheen Akhter      | Sharon Shim            |
| 6. "This is Our Fight"    |                  | Anushree Jagtap    | Ciara Brennan          |
| 7. "The Oath"             |                  | Lauren Gilbert     |                        |
| 8. What is Lost in Teleps | sychiatry        | Sonia Dhaliwal     | Halimah Hamidu         |
| 9. Morning Meadows ar     | nd False Summits | Ryan Crane         | Anastasia Bury         |
| 10. "Safe Haven"          |                  | Kate Lynch         |                        |
| 11. "Lovely Leighton"     |                  | Jennifer L. Lamont |                        |
| 12. The First Step        |                  | Dave Hiltzik       | Ciara Brennan          |
| 13. Back Cover Photo      |                  | Maheen Akhter      |                        |

### Selected Works and Commentary Brenda Varriano

To work in a cadaver lab is one of many privileges experienced by a medical student. It enables the first-hand experience of exploring and appreciating the wonders of the human body. However, current anatomy does not fully allow us to appreciate the rich history that has led us to our modern curriculum. The study of anatomy has its roots in ancient times, where human anatomy was studied postmortem in gladiators. Galen is one of the founding fathers of anatomy, and his studies have been followed by many successors, including but not limited to: Leonardo Davinci, Andrea Vesalius, Juan Valverde, William Hunter, Henry Gray, and more recently, Frank Netter. To me, anatomy has always been a whimsical subject, where science is heavily embroidered in artwork. My first fascination with anatomical artwork began during my undergraduate studies, when I first saw the Zodiac Man. (Wee, 2015) The Zodiac Man was a figure of a man with different zodiac signs on various parts of his body. (Wee, 2015) If it was the month of May, the month corresponding with the astrological sign of Taurus, then the diagnosis would be a sore throat due to the placement of the Taurus sign on the Zodiac Man's throat. While this may seem obscure in today's era of modern medicine, these pieces of artwork guided medicine and were influential in medical education and practice. Therefore, given the opportunity to explore medicine through artistic expression, I have chosen to depict select famous anatomical pieces of artwork that have

contributed to the rich history of anatomy and medicine leading to our modern era.

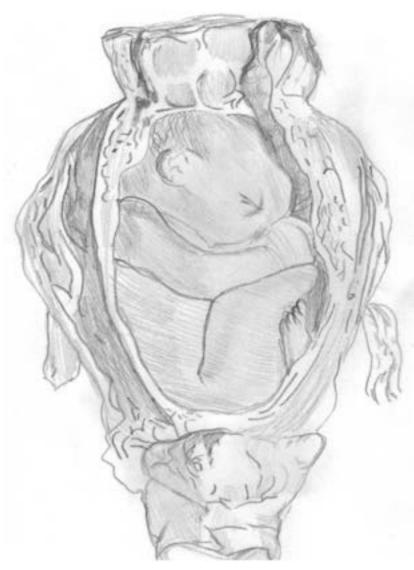
One figure I have chosen is the Vitruvian Man, the infamous drawing of a man superimposed in two positions in a circle as his arms and legs are spread out to depict the perfect human proportions. (Creed, 1986) This piece of work was created by Leonardo DaVinci, who was known to be a famous artist, architect and scientist. While his legacy is most attributed to his artwork, his importance in the field of medicine is often uncredited.



Some of his famous contributions in the field of medicine had included the physiological explanations of bodily functions such as the heart as a pump. (Jones, 2012) Furthermore, he was the first to define atherosclerosis and liver cirrhosis. (Jones, 2012) I have chosen a piece of his work for other reasons. I believe that the Vitruvian Man is the best of example of how anatomy played a role in culture and the arts. I have seen this figure in restaurants, art textbooks and museums, as it continues to be a piece of artwork in our modern time, more so than a figure seen in a scientific textbook.

For the next drawing, I drew upon a famous piece of work created by Juan Valverde de Amusco, a Spanish anatomist. In this drawing, he shows a man holding his own skin in one hand, and a knife in the other. Juan Valverde was inspired by Vesalius' works, resulting in accusations of plagiarism. (López-Valverde, 2013) However, Valverde had been editing and reworking what had been described in The Fabrica about Vesalius' previous dissections. (López-Valverde, 2013) Ironically, the accusations against Valverde increased his fame and aided in the dissemination of his works, making him one of the most influential Hispanic anatomists of all time. (López-Valverde, 2013) I have chosen to recreate the drawing of the man holding his skin, due to the intensity and theatrical nature of the piece. Moreover, to me, this drawing represents the diffusion of scientific knowledge during a time when medical knowledge was beginning to be shaped into the form we know it as today.





For the last drawing, I have chosen a figure from the Anatomia Uteri Humani Gravidi Tabulis Illustrata, by William Hunter. Figures from this book were created from dissections of pregnant women, therefore providing one of the first observational and evidence-based depictions of pregnancy. (Wagoner, 2017) The development of the book began in 1750, when Hunter had obtained the body of a women who had died 9 months into gestation. (Wagoner, 2017) Over time, Hunter completed more dissections, until the final publication of the book in 1774. (Wagoner, 2017) Other contributors to the textbook included John Hunter, his brother and other anatomy students at the Covent Garden in London England. (Wagoner, 2017) This textbook, while influential, was a limited commodity, as the first edition was created on copper plates, making it difficult for other medical students to gain access to it. (Wagoner, 2017) I

have chosen to include an image of a baby laying in a placenta that had been cut open. To me, this depicts the symbolic birth of a new field in medicine, obstetrics and gynecology. Moreover, anatomical figures were becoming more accurate and objective, lacking the artistry of previous works.

So ends a list of famous anatomists and their works. While I have not covered every influential figure or drawing, these works show that anatomy was not always as scientific as it was today. Anatomy is not only a science, but also an art, a story, and a cultural ideology. Anatomy is one of the foundations of medicine, and the cadaver our first patient.

Creed, J. C. (1986). Leonardo da Vinci, Vitruvian Man. *JAMA*, *256*(12), 1541-1541. Jones, Roger (2012). "Leonardo da Vinci: anatomist". *British Journal of General Practice*. 62 (599): 319. López-Valverde, A., De Diego, R. G., & De Vicente, J. (2013). Oral anatomy in the sixteenth century: Juan Valverde de Amusco. *British Dental Journal*, *215*(3), 141-143. Wagoner, N. (2017). "Anatomia Uteri Humani Gravidi Tabulis Illustrata (The Anatomy of the Human Gravid Uterus Exhibited in Figures) (1774), by William Hunter". *Embryo Project Encyclopedia* 

Wee, J. Z. (2015). "Discovery of the Zodiac Man in Cuneiform." Journal of Cuneiform Studies 67(1), 217-233



"The Giver" Lane Stamp

Wheeling in, he gave a cheery hello! What brings you here, Sir, the Doctor bellowed? "Not able to walk, it's this pain in my side", Quite unfortunate, but very good for Doctor's pride.

They talked of their families, their troubles, Her son in college, bright but in shambles. Not to worry, the aching man reassured, "Call my friend; your son, he will surely treasure."

Concluding, I am afraid, you will have to come in "I am, too, afraid, where the future is going"
The Porter, looking to buy a new pick-up, he tipped Him how, when and where between hiccups

In bed, now, looking every part, invalid Reduced to a number, no longer stolid The Nurse with a relationship question Some sage advice without admonition

Deep in the bowels of the basement for MRI Pain increasing, specialists hovering to see why. Young resident deciding what to do, where to go, Helpfully sharing his experience, invisible ego.

Without appeal, tests revealing but with cost, A serious circulation problem, all seems lost Staring at the bare ceiling, smiling, knowing At least parts of him will be surviving

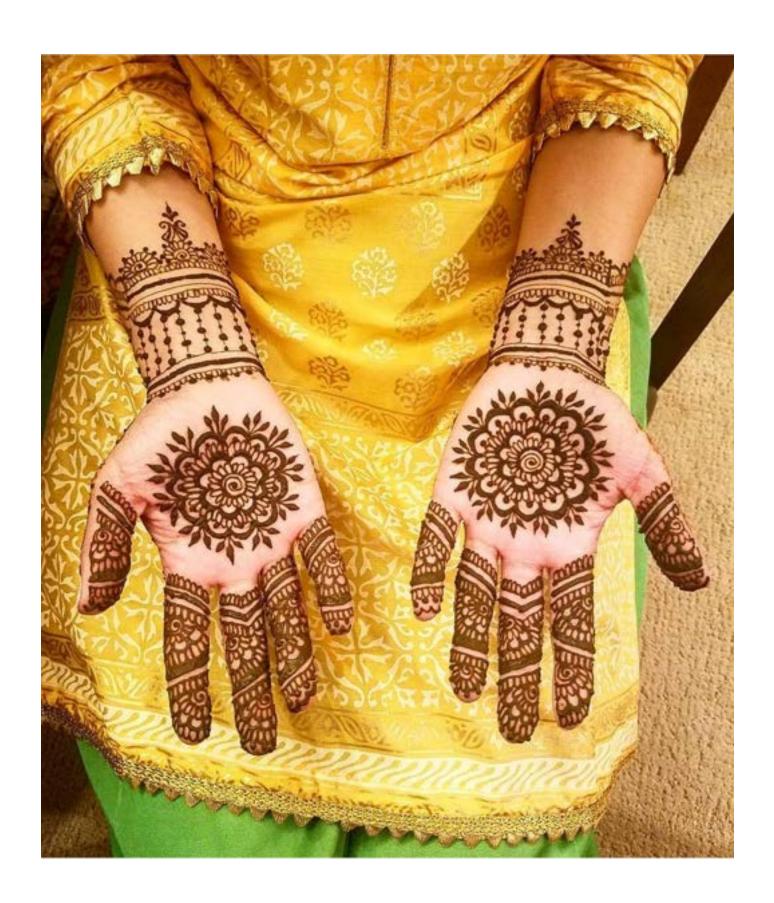
The paper will later write to everyone's comfort Thanking his Doctors and Nurses for their efforts Who was the helper? Who was the helpee? Impacting one another unknowingly.

#### Selected Works and Commentary Maheen Akhter

I used to hide my henna-covered hands inside the sleeves of my sweatshirt in third grade because the other kids at school would point at them and say I was dirty. I had to explain what the flowy patterns on my hands were to my teachers more times than I'd like to admit, usually to avoid getting sent to the principal's office (apparently, they looked like marker drawings—how delinquent of me). What was initially the excitement and joy of having my mehndi done on the weekend quickly faded to embarrassment and resentment by Monday morning at school... how had something that I loved so much become a source of sabotage to me?

You see, in my culture, henna is applied on our hands and feet in times of celebration and happiness. Almost every year on the night before Eid, an Islamic holiday, my family would host a small get-together called Chaand Raat ("Night of the Moon") and the women would take turns applying henna on each other in anticipation of the next day's celebration. Attending Pakistani weddings was nearly the same—my colorful shalwaar kameez outfit could never be complete without shiny glass bangles and mehndi paisleys stained into the palms of my hands. From all over Africa to the Middle East. and to South Asian countries and beyond, henna is widely known as the ultimate form of beautification for women.

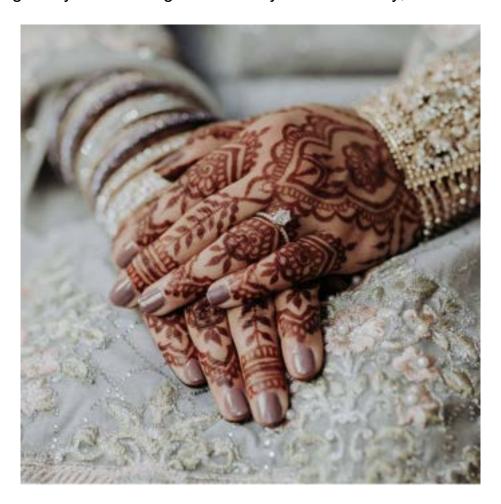




It was never easy for me to find a middle ground between the way my Desi family raised me and the expectations I faced in trying to be "American" (whatever that's supposed to mean). Henna was one of many things that seemed to be acceptable at home but was met with snide remarks in public. I felt extremely self-conscious eating lunch at school when I'd bring leftover Pakistani food ("Ew, it smells weird, is that curry?"), and if I answered a phone call from my parents, their conversation in Urdu would be met by my short replies in English. Particularly in a post-9/11 world, I found it far easier to conceal or often criticize many things that were central to my identity. How could I possibly be proud of the traditions, language, and clothing that made me look like an outsider?

I moved away from home for the first time when I started college. It was everything I could have ever wanted— tailgates and football games, frat parties, burgers every day at the dining hall. The American dream, truly. I could finally stop juggling my two separate lives and embrace the full college experience once and for all.

One day, I got off at the wrong bus stop just outside of downtown LA, and as I walked towards my destination, I stumbled upon something oddly familiar. It was an Indian grocery store—a sight for sore eyes! Instinctively, I followed the fragrances of the



masala mixes and fresh samosa pastries right inside, only to be met with a box full of henna cones by the cash register. Despite my constant efforts to obscure my culture throughout most of college, this was the first time that I felt a sense of home around me. Naturally, I bought a few henna cones to take home with me. and the rest was history.

My journey with mehndi is a coming-of-age story that continues to unfold,

even today. What started as a late-night hobby of doodling on my roommates' arms quickly became a side gig on campus and later blossomed into a full-on small business. From music festivals to corporate events, and from weddings to private parties, little by little, henna helped me regain a healthy relationship with my culture and heritage. Doing henna on others was a wonderful way for me to share stories about my culture and dismiss inaccurate assumptions that others held (often the very assumptions that drove me away from my culture in the first place). When I do henna at weddings or at other Desi events, I'm thankful for the opportunity to meet new friends who share my background and celebrate our common culture. With growth as a business venture, mehndi has also enabled immeasurable growth within myself.

My narrative is far from uncommon. Many of us who are immigrants or children of recent immigrants experience similar difficulties in becoming comfortable with our identities. In areas with less diversity, it can be even more challenging. Had I been met with more curiosity and open-mindedness, as opposed to offense towards my culture, my experience could have gone very differently. I hope my story can inspire others to be kinder and more thoughtful in approaching cultures and practices that may seem unfamiliar at first glance.

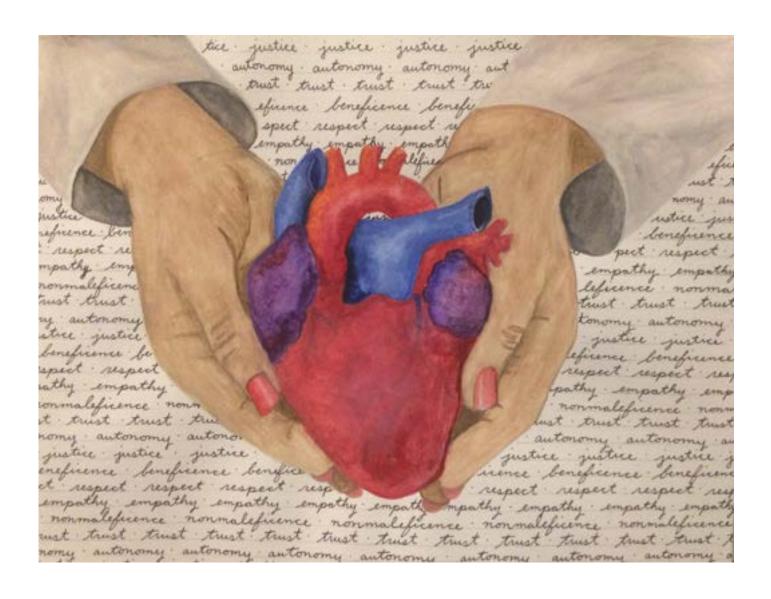
### "This is Our Fight" Anushree Jagtap

I was inspired by the BLM movement last summer so I wrote this song to express my frustrations and experiences growing up with discrimination. I write and sing songs to express my feelings and relate to others. With this song, I was aiming to express my emotions and I hope others who have been through similar experiences can relate with the song.

https://youtu.be/sOik7ZP5WoE



#### "The Oath" Lauren Gilbert



## What is Lost in Telepsychiatry Sonia Dhaliwal, MD

In the conference room on the child and adolescent inpatient unit, I was on a collateral phone call with my patient's father. He relayed a detailed history suggestive of oppositional and defiant behavior. After the patient's last hospitalization in early 2019, she was established with a therapist, but when the COVID-19 pandemic broke, her therapist started seeing her via video appointments. Her dad was concerned his daughter was not engaged in therapy anymore. "There's so much lost in therapy when you can't sit down with someone," he said.

When the COVID-19 shelter-in-place order was established in Michigan on March 24, 2020, telepsychiatry was swiftly established to allow patients to meet with their behavioral health providers virtually, both in the inpatient and outpatient setting. Over a year later, many of our patients continue to be seen in this way. Group therapy and support groups throughout the community remain disbanded. While these changes have been necessary to prevent the spread of COVID-19, they have also resulted in many challenges to providing sound patient care.

Some patients are having a hard time accessing the care they need due to lack of technological resources. This proved to be an issue for a particular male patient in his 60s with severe anxiety. He was discharged from the geriatric inpatient unit after an admission for suicidal ideation. Throughout admission, it became evident that his restless sleep, severe anxiety, and suicidal ideation were refractory to medications. In the past, these symptoms had been well-treated with psychotherapy, however he stopped attending psychotherapy after relocating to a new town several years ago. Prior to discharge, a follow-up appointment with a therapist was scheduled for him. However, just a few days later, he called requesting to be re-admitted to the geriatric inpatient unit. When I called him back, the patient shared that he could not set up a video conference with his new therapist because he does not own a smart phone or laptop. After further discussion, it became evident that the underlying issue was that he did not feel comfortable talking to a therapist over the phone and wanted to sit down with someone face-to-face. Because his debilitating anxiety was resulting in ongoing suicidal ideation for him, ultimately we recommended inperson therapy services, which his therapist was able to accommodate.

Although much of psychiatric care can be conducted via phone or video conference, some difficult encounters must be done face-to-face, like delivering bad news. This is especially true if you have yet to build a rapport with your patient. I learned this when working with a pre-teen patient who was admitted to the child and adolescent unit for aggressive behavior and threatening statements made towards his foster siblings. His foster parents had filed a 30-day eviction notice for him several weeks prior and were unwilling to take him back into their home. On the day of discharge, the patient entered the conference room and I asked him if he would like to play a game of tic-tac-toe. He agreed, and as I set up the board game, I explained to him that he would be going to a new home, not back to the foster home where his biological siblings remained. He instantly became tearful and withdrawn. As he cried, his tiny body quivered with his heavy sobbing. I realized that although I could not say anything to make him feel better, by sitting next to him, he could process this bad news without feeling alone. Eventually, he wiped his tears away and his shoulders relaxed. I asked him if he would like to make the first move in the tic-tac-toe game. While we played, we discussed the new housing arrangement, and although the patient remained concerned, he eventually smiled and felt victorious when he won the game of tic-tac-toe.

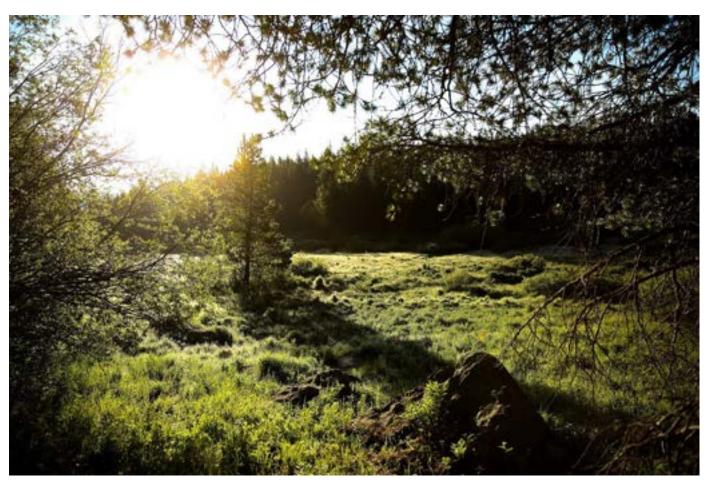
When my patients sit down in my office, they have invested time and effort to present to the clinic for their appointment, making them accountable for their care. The therapeutic encounter isn't disrupted by technological limitations like lack of access to video chatting or poor reception. The patient has left the outside world and retreated into a safe space, providing them with some relief from their stressors. They can see that I am giving them my undivided attention, because my phone is put away, and my eyes are on them. They feel important, and worth my time. All of this is lost when we can't treat our patients face-to -face.

Note: Minor facts have been changed to protect the identity of the patients.

# Morning Meadows and False Summits Ryan Crane

The 3 a.m. alarm went off, but I had already been awake for hours mapping our route for the day. In just a few short hours we were to begin our twenty-mile round trip hike featuring an ascent of Mountain of the Holy Cross, an absolute monster towering over us at 14,085 feet. In preparation, I had been hiking every day covering varying heights and distances and as such, believed myself to be ready. My pack, Camelbak, crampons, hiking boots, snacks, and camera equipment sat neatly assembled in the corner, eagerly packed the night prior. The photographer in me was incredibly excited as I hadn't had a good opportunity to shoot since starting medical school.

We arrived at the base of the mountain at 5 a.m. the trail lit only by our headlamps. Within the first mile, my relatively unconditioned lungs started to burn, and I gradually fell behind the rest of the group. Turning the corner after a particularly grueling set of switchbacks, we came across a meadow. The morning dew still clung to the leaves as the sun began to rise. I stopped in my tracks, caught off guard by the beauty and serenity. I raised my camera to my eye and carefully adjusted the aperture, f-stop, and shutter speed to allow in the perfect amount of light before compressing the shutter-release button, capturing the enchanting scene and freezing that moment in time forever.



Morning Mountain Meadow

I slung the camera back over my shoulder and resumed trekking up the mountain. As I marched on, the air thinned, further fanning the flames already lashing my lungs. It took great concentration to coach my body to take deep breaths, *in through the nose and out through the mouth*. I mentally counted every step, allowing myself a much-needed rest following each successful set of fifty. My pack grew heavy...note to self...metal water bottles...bad idea.

After some time, our group of five split up; the three faster, native Coloradans forged ahead leaving me and my friend Humphrey to pull up the rear. It wasn't long after that when Humphrey relieved me of my pack and slipped it on his front like a kangaroo pouch mirroring his own which he wore on his back. With superhuman strength and conviction, he continued to all but drag me up the trail until finally, we approached the top.

Adrenaline pumped through me as I desperately gathered the remnants of my morning's excited energy to cover the remaining distance. Cresting the peak, I was crushed to discover I had conquered only a false summit. Physically exhausted and emotionally devastated, I collapsed on the ground. It looked like I was still more than a mile from what I now assumed to be the apex. By this point, more experienced hikers who had already completed the trail were descending toward us. Each passing hiker smiled at the pathetic pile of me laying on the boulder off to the side and offered words of encouragement. "You're almost there!" "The hard part is over!" "Basically at the top!" While I appreciated their proffered optimism, I could plainly see it was a long way to the final ridge and I wasn't sure I could make it. Recognizing this was as far as I would go, Humphrey sat affably beside me, watching as I summoned the last of my strength to again raise my camera and preserve the moment with the click of a button.



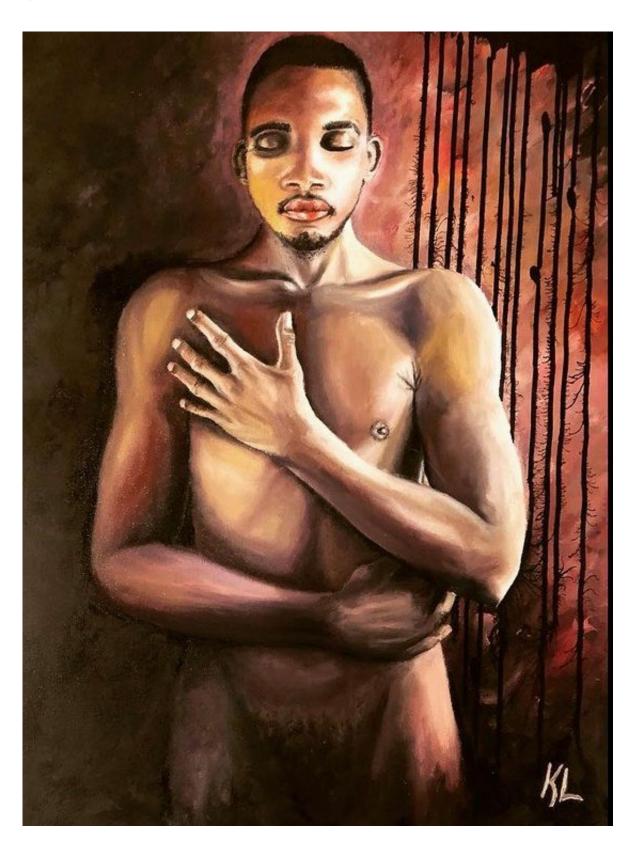
False Summit

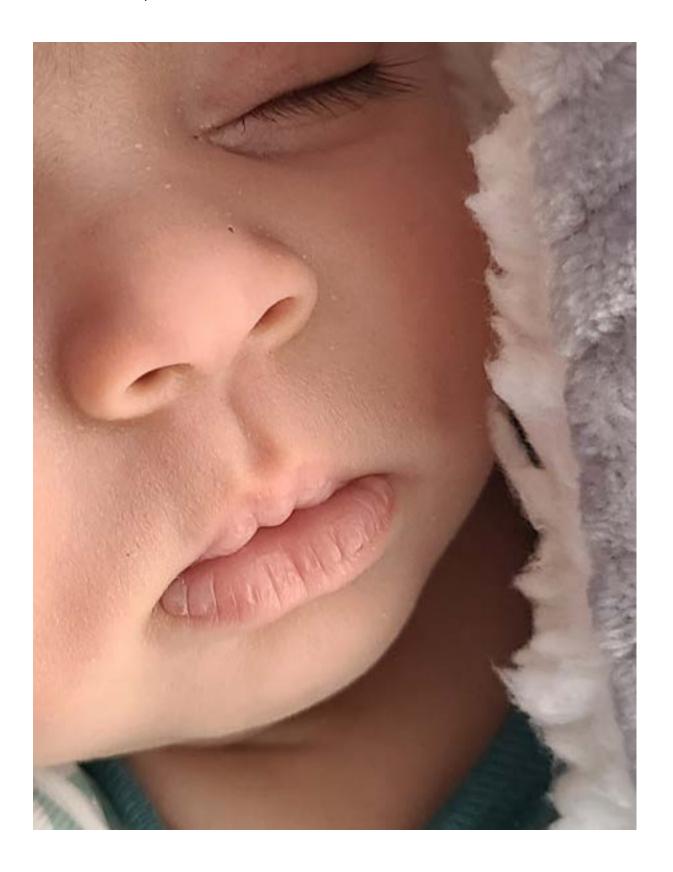
Eventually our faster friends grew concerned when Humphrey and I had still not arrived. They circled back to find where I had claimed a nice boulder throne from which I surveyed the mountainside as self-proclaimed king of the false summit. Without hesitation they split up my gear and once more turned upward, determined to assist me in reaching the top. Carried by their continuous words of encouragement, my newfound resolve pushed me beyond what I thought possible and together, step by step we scaled the final switchbacks. With my whole body shaking and more exhausted than ever before, I smiled in awe as I looked out over the snow-covered landscape. Someone pulled a bottle of champagne out of a pack and we cheered loudly as we toasted to my first "fourteener" and to the friends who helped me along the way.

Once home, we gorged ourselves on pizza and breadsticks to celebrate the day's achievements and later that evening while repacking my hiking and photography equipment, I reviewed my photographs. Reveling in the majesty of the stilled moments, I neatly placed it all back in the corner — ready and waiting for my next adventure.



(L-R: Humphrey, Ryan, Jolly, Jackie, Kasey) – Mountain of the Holy Cross 14,085'





# The First Step Dave Hiltzik

"This is the hardest part, Retro, try again," said Coach. I was on one knee when he said it, so drained and battered that when I stood, I teetered briefly before squaring my shoulders towards Thor for yet another attempt at the dreaded tackle box. It was a sunny day in August, and the edges of the clouds stood out against the cobalt sky as vibrantly as Thor's neon orange cleats on the green of the pitch. Around us, I could hear the shouting, grunting, and rhythmic cadence of my teammates, split into four roughly equal groups to rotate through a series of technique and conditioning drills. Thor was on break from Syracuse where he played Division 1 rugby; 260 pounds of dense Ghanaian muscle, here to visit his old friends and break us down for our own good. We called him Thor because his name, Ekow, is commonly given to Ghanaian children born on Thursdays.

"Your instincts are going to be telling you to resist everything you need to do. They'll tell you to move, to run, to protect yourself, and you have to ignore them." said Coach. His salt-and-ginger hair moved gently with the breeze, but he hadn't budged from where he stood along the edge of the tackle box, even when my previous attempt sent me careening clumsily to his feet. "Actually, more than ignore them. Actively resist the urge to get out of the way." He chirped the whistle and Thor barreled towards me once again, boring into me with his gaze as he closed the 10 meters between us with alarming pace. I stepped in his gait, threw my cheek towards his hip, and felt my shoulder shudder from his momentum. Then there was sky. Dirt in my mouth.

"Whenever you need a rest, just let me know," I said to Thor as I peeled myself off the ground once again.

He chuckled thunderously through a casual grin, idly tossing the ball from hand to hand with a clean pair of heels after my failed attempt to take him down. "You got this, Retch," he said, the rich alveolar tap dance of his accent betraying none of the ferocity he summoned with each fweep of Coach's whistle. "One more time, you good thing."

Up until this point, I'd achieved some praise as a decent tackler mostly through sheer aggression. But now, at the start of my third year of playing the sport, I had begun to plateau and became determined to master the textbook three-step rugby tackle: First, step between the ball-carrier's feet, splitting their gait and positioning your hips and center of gravity in front of theirs; next, drop to hip level and go cheek to cheek (face to ass), so you don't catch a stiff palm to the throat; finally, throw the shoulder, wrap the arms, and let momentum do the rest. Thus far I'd typically ignored the first step, instead skipping straight to launching my shoulder at whatever part of my opponent I could reach. This was reasonably effective, but it lacked stopping power, and it definitely didn't look as cool from the sidelines as standing someone up, levering them horizontal, and driving them back a few steps, which one can only accomplish with perfect technique. So now, in an attempt to improve my game and up my cool factor, I had to work through the mental block of that decisive first step.

Taking a forward step between the feet of a charging man-mountain is a point of no return, a deliberate endangerment of one's own personal safety. It is exactly contradictory to basic survival instincts, so it takes some practice before your brain rewires and allows you to position your hips, spine, and skull directly in harm's way. This aspect, putting your body on the line, is what makes it an effective start to a good tackle. Even if you do nothing else, the opponent must crash through the trunk of your tree, not just the branches. But it's also the most difficult. Step too early, and they'll just sidestep to your branches. Step too late, and you're on your heels when they hit you. You have to time it just right, which is doubly challenging when your instincts are shouting, "Get out of the way!"

Mentally preparing for medical school felt a little like that. I took a long road to commit to it, and during those 6 years I often felt a scared, quivering part of me urging me to abandon my plans, and choose a less demanding path. I was standing at the mouth of a decade-long tunnel, and barrelling through that tunnel from the other end was 260 pounds of solid terror made of elbows and knees, bearing down on me with fury and malice. But I could just...leave. I could just turn around and never enter the tunnel. I could write, travel, play music, and read for pleasure and surely, over time, I'd find or build a career capable of fulfilling me. In the rational part of my brain I wrestled with my reasons: Why did I want to go to medical school? Were they the right reasons? Would I be happy doing something, anything else? But ultimately, I was drawn to the tunnel because among a litany of other motivations was the fact that I wanted to bring that elbow-monster down. As interviews and acceptance came and passed and matriculation day drew closer, the confident, unconscious part of me started to feel like maybe I had done it before.

The lessons that rugby teaches its disciples arrive gradually and only in the shadows of its larger appeal. Ask someone who's been playing the sport for two years what it is that draws them to it, and they're likely to say the intensity, the thrill, or the camaraderie. Ask someone uglier, who's been playing for ten years or so, and you'll start to hear things like: "Rugby made me a better person." The habits we drill into ourselves on the field seep into our lives in vast fortifying tendrils, making us just a little bit better at everything we do. The drive to get up off the ground when your ribs are screaming, the will to endure suffering and exhaustion in service to those who've shed their blood with you, and the emotional control required to stand your ground against a towering, stampeding opponent, all of these and more have myriad analogues in the real world, and practice makes perfect.

In the same way these skills on the field bleed into our everyday lives, so too does the elegant violence of a Saturday match survive the night to wake with us on Sunday morning. We have a name for this peculiar sweet agony of the morning after: We call it "the rugby hangover." It's when you wake up with a strong dull ache from the base of your skull through your spine and shoulders, fundamentally different from the compliant tenderness of your eyebrows and cheekbones that you noticed yesterday. When you take your first steps out of bed, the ache drips into your heels like hot spring water pouring down the ruins of a forgotten stairway. You're held together by barbed wire, soft sunlight, and warm coals slowly roasting muscles you didn't know you had, in the front of your throat and the crooks of your elbows and between each of your ribs. Ankles and vertebrae creak and groan, bearing reminders of ancient wounds that had healed and slumbered until just now approaching reinjury, but not yielding, at least not this time. I have always adored this tatterdemalion sunrise because as a wise doctor once said, "Man cannot remake himself without suffering, for he is both the marble and the sculptor." On Sunday mornings, I awake on a soft bed of finely ground marble powder to this song of punishment and fortification, of trauma and triumph. It is a dark and enchanting melody, and rarely have I felt more alive than on those mornings.

Although I'm less inclined to wax poetic about it, there have certainly been mornings I've awoken feeling battered and exhausted by medical academia as well. Just as I am tested on the rugby pitch by big mean fuckers who want to break me, so too am I tested in medical school by less big, less mean, and less deserving-of-profanity examineers who want to push me, challenge me, and make me prove myself. But suffering gives flavor to the payoff, and having found serenity in the crucible before, I find the long hours of studying to be much sweeter in retrospect than they were in anticipation.

In my first year of medical school I made friends with the CMU Exiles Rugby Club and joined them at training whenever I had the time. I was mostly just running around with them for fun, seeing as how I was technically ineligible for any actual league matches. Without a real coach, many of them looked to me for guidance. I'm a modestly above-average rugby player, but on a pitch with a bunch of kids who only have a couple years' experience under their belts, a ten-year-man is inevitably identified as one who knows their stuff. One night I found myself in a familiar position, albeit with the roles reversed.

"How's your face, Battle Bacon?" Bacon's teammates teased him lightly as they helped him up from where he lay after my unceremonious stiff-arm. We pull our punches a bit during training, but not by much. "Need someone to count your teeth?"

"Just wait 'til it's your turn, assholes. That's a nasty fend, Retro, what the fuck am I even supposed to do about that?"

"You're coming in too high," I chuckled. "It's a bad habit and as long as you keep it up I'm gonna keep punishing you for it. If you're quick you can try to latch onto my arm and bring me down that way, but it's better to just get low so you're not a target. You guys haven't been drilling your tackle progressions."

We had a light turnout at training that night, near the end of the fall season as the air grew colder and finals approached for many of the undergrads. Under a gray and indifferent sky, the ragged brown grass muddied under our feet, sticking to our elbows as dry cakes pleasantly cool to the touch. In the stippling evening wind I briefly had the attention of a dozen young impressionable ruggers, so I quickly walked them through the three steps of a textbook takedown and traced out a tackle-box to practice.

Moments later Bacon grunted to his feet once again in the center of the box. I tossed the ball idly from hand to hand, heels clean after his second attempt to take me down. I'm no Thor, but I still had a few pounds on him and youthful optimism only goes so far. I did feel a little sorry for him - this kind of weather makes the dirt flavor really pop.

"That was better," I said, "but this time think about your hips. Stepping between my feet does nothing for you if your hips are still off to the side somewhere. You have to put yourself in my way, by squaring your hips up-field and making them intersect with my hips. By getting that first step right and putting your center of gravity in front of mine, you're telling me, 'You may win this round, but you'll have to knock me on my ass to do it."

"I keep wanting to shift to the side," he said, gently punching his temples in frustration. "It's like a mental block or something."

"Oh that's just your survival instincts. We don't use those out here," I laughed. "But for real, this is the hardest part. It takes a lot of practice and a lot of control to make this second-nature. Sometimes you just have to put yourself in the spokes, and ask your body for forgiveness, not permission. And every time you take a hit, you'll get a little bit better at dishing them out."

He nodded thoughtfully as I traced my steps back to the starting point. "Again!" I bellowed as I built a head of steam. This went on for several more rounds, but he refused to let me stop until he finally brought me down.

This is the way of the rugby work ethic. We toil, we hurt, we puke from exhaustion, but victory washes away the bile and bruises. The life of a med student is not so different; so very, very fulfilling but rife with struggle and inadequacy, with late nights and low candles. It's a lifestyle that demands a stiff upper lip, steadfast dedication to responsibility, and a short memory for inevitable sacrifice and defeat.

These are the lives I chose, rugby and medicine, seemingly so diametrically opposite. One a deliberate endangerment and disregard of physical health for fun, and the other a solemn, dedicated oath to protect and remedy it. Without the benefit of retrospect I could never have known how intertwined they would be, how the same strategies I learned from tackling technique with that forward first step could be used to approach Step 1 of boards. I thank whatever gods may be for my time spent on the pitch, and for the Coaches and Thors of yesteryear who first wove this web of common threads between my formative past as a rugby player, my present trial as a medical student, and my future as a washed-up rugger physician.

### Acknowledgements

A special thank you to Dr. Cascio and Dr. Reddy for being the wonderful faculty advisors to the College of Medicine White Coat Central. We are inspired by your commitment to celebrating artistic expression within the field of medicine and beyond.

Thank you in addition to Kate Worster, Michael Zehnder, and Mike Molter for contributing their time and enthusiasm to support our project this year.

We have thoroughly enjoyed the opportunity to work with and showcase the creative works of fellow members in the College of Medicine's community.

Sincerely,

Anastasia Bury, Class of 2023 Brandon Palmateer, Class of 2023 Soundharya Subramaniam, Class of 2024 Sharon Shim, Class of 2024 Ciara Brennan, Class of 2024

CMU, an AA/EO institution, strongly and actively strives to increase diversity and provide equal opportunity within its community. CMU does not discriminate against persons based on age, color, disability, ethnicity, familial status, gender, gender expression, gender identity, genetic information, height, marital status, national origin, political persuasion, pregnancy, childbirth or related medical conditions, race, religion, sex, sex-based stereotypes, sexual orientation, transgender status, veteran status, or weight (see <a href="http://www.cmich.edu/ocrie">http://www.cmich.edu/ocrie</a>).

