Special Supplement 2025

South Dakota medicine

HUMANITIES SUPPLEMENT

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Cover Painting

The Immortality of the Human Heart, Eyob Mergia

Remembering COVID-19 and the Power to Begin Again

"To care is to live forever, and those who care become the makers of tomorrow."

This painting is a tribute to the human spirit during the COVID-19 pandemic, a time of fear, loss, and profound resilience. At its heart, it honors the quiet bravery of doctors, nurses, and caregivers who stood at the threshold of life and death. Clothed in masks, gloves, and courage, they stepped into the unknown each day. They were not only medical workers; they were protectors, healers, and modern-day heroes. For their selflessness and sacrifice, they deserve more than our gratitude; they deserve a purple heart of humanity.

The painting flows like time, from the shadows of suffering to the light of renewal. On the left, a woman holds a lantern over another figure, a symbol of guiding hope in the darkest hour. Below, a mother cradles her child with tenderness and faith, while behind them the virus drifts like a distant cloud, a reminder of the invisible enemy we all faced. At the center, a nurse, a child feeding birds, and a man with medical tools embody care, duty, and the quiet gestures of love that held the world together. On the right, a young girl blows bubbles. They rise, become clouds, then rain, out of which a golden field blooms, filled with butterflies and wildflowers. This is a metaphor for renewal: how loss becomes memory, memory nourishes growth, and growth rekindles hope.

This painting is more than a record of a moment; it expresses a universal idea that belongs to all of us. It speaks to our shared human experience: how we carry the past, live in the present, and still imagine the future. Even in the most uncertain times, we remain part of a larger story, one that stretches across generations and gives meaning to our survival.

Above, scenes of hospital care, emergency rooms, and candlelight vigils evoke both the urgency of crisis and the sacredness of remembrance. The candles burn for those we lost, lighting the way for those who remain. Yet through all this pain, something deeper shines through: the unshakable truth that we are still here. We have the wisdom to learn, the heart to care, and the strength to heal. We are not only survivors; we are the makers of tomorrow.

When we hold on to love, to care, and to one another, we begin again. This painting is not only about the past; it is a doorway to the future. A reminder that from every darkness, we rise together.

This painting does not only remember; it endures. It lives, it breathes, and it carries us forward.

Legacy and Trajectory

Jerome W. Freeman, MD, FACP; and Tim Ridgway, MD, MACP

The Legacy Gallery in the Health Sciences Center is the west hallway leading to the medical center. Many students, faculty and staff pass through the corridor each day. This passageway has proven to be an excellent venue for a visual arts gallery. The current art installation highlights the collaborative work of photographer Tom Dempster and visual artist Molly Noem Fulton.

The gallery/hallway has the "legacy" name to acknowledge the graduates of our medical school whose class photographs, along with photos of prior SSOM deans, adorn the walls. At its midpoint, a second passageway bisects the Legacy corridor and this crossing has become known as the Legacy Intersection.

The title "Legacy Intersection" champions an additional legacy with a display of Native American Star Quilts. Such Star Quilts by the Lakota/Dakota/Nakota reflect origin stories and significant life points. Misty Wolf Necklace's stunning satin Star Quilt was recently added to three other quilts at the Intersection. The brilliant colors and radiance of Necklace's work can imply celebration at a significant life point.

And indeed, a visual symbol of celebration is especially timely for our medical school, given the recent announcement that Pillar 1 student education will be moving to Sioux Falls. Clearly, the advantages of this transition for students and faculty mark an optimistic trajectory for our medical school's future. The word "legacy" is most important when discussing this transition. We remain deeply committed to the school of medicine's mission to provide high quality medical education for its students, with an emphasis on providing a workforce for *all* of South Dakota. Rural healthcare is our strength, and we will not shy away from it. The transition will benefit our students and faculty participating in the preclinical curriculum. Our students will be even better prepared to obtain their subsequent clinical training in Rapid City, Sioux Falls, Yankton, and our rural FARM communities. This is our mission, our legacy.

Misty Wolf Necklace, Star Quilt.

In a sense, the humanities often fill the role of honoring legacy and illuminating human trajectory. As poet and physician, John Stone, noted in his valedictory address to graduating medical students at Emory:

> For there will be the arts
> and some will call them
> soft data
> whereas in fact they are the hard data
> by which our lives are lived[1]

The field of medicine has long had humanities champions. Clearly, this Humanities Supplement of *South Dakota Medicine* celebrates the creativity and promise of our students and faculty. These current works mirror the spirit of Sir William Osler's last public address in 1919 entitled "The Old Humanities and the New Science." In that speech, Osler called for the reunification of science and the humanities.[2] He was indeed prescient as both a physician and educator.

The humanities broaden our worldview and sharpen our instincts. They help foster the wisdom needed to appreciate subtle nuances encountered in patients' lives. The humanities can help us act with flair and grace and a sense of well-being. Sometimes, that can make all the difference.

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Jumping into My Future Career

Carly Haring, MS III

It is fascinating how one's identity shifts over time, yet each layer remains a part of who we are. For much of my life, I was known for being a high jumper in the sport of track and field. After introducing myself to new faces, I was often met with the question, "Are you the high jumper?" Track and field gave me many opportunities, and high jump became the event in which I stood out. I was fortunate to compete at the University of South Dakota, where I faced some of the nation's best athletes. At first glance, high jump and medicine may seem unrelated, but the sport has shaped me in ways that now guide me as a medical student and future physician.

High jump is a technical event that demands both knowledge of physics and persistent dedication to learning. Already, the parallels to medicine are clear. The sciences consumed much of my undergraduate and early medical school years, and lifelong learning is an essential skill for any physician. When I first arrived at college, my coach immediately set out to transform the way I ran. Relearning how to run proved far more difficult, and humbling, than I imagined. It took nearly a year of one-on-one coaching to change my mechanics. At times it felt frustrating and even embarrassing. How could I be a Division I track and field athlete and not know how to run properly?

The effort eventually paid off. At my first track meet in my second year, I cleared a personal best by nearly three inches, ranking me first in the nation among Division I high jumpers for almost a month. That moment taught me the values of willingness to change, taking advice from those with more experience, and trusting the process. I see my clinical preceptors in much the same way I saw my coaches. When they demonstrate a new way to interview a patient or refine a skill, I welcome their guidance, knowing it will make me a stronger physician.

Success in high jump was never just about technique. True progress required discipline and perseverance. I learned consistency by prioritizing sleep, nutrition, recovery, and training day after day. That same consistency now sustains me in medical school, where success depends not on short bursts of effort but on steady commitment to learning and growth.

Of course, change and growth often come with frustration. As a type-A competitor, failure was difficult to accept. Yet some of my greatest lessons came from failure. I remember entering the conference championship meet as the top seed, confident I could finally claim a title. Instead, I missed my opening height three times, which in high jump meant elimination from the competition. I left the meet in last place.

That experience was devastating, but it reminded me that preparation alone does not always guarantee the outcome we hope for. What matters is focusing on the components within our control and continuing to improve. By the next conference championship, I brought that mindset with me and was able to secure the gold medal. I carry the same perspective into medicine. When I began learning to suture, my hours of practice on artificial skin pads did not spare me from awkward first attempts on patients. Still, I knew from high jump that mastery comes not overnight, but through practice, patience, and humility to learn from mistakes. With feedback from my preceptors and continued practice, my sutures have grown steadier and more confident over time.

Though I may no longer be introduced as "the high jumper," that identity continues to shape me. The sport instilled in me resilience in the face of setbacks, humility to learn from others, and dedication to long-term goals. These lessons live on in my training as a future physician. In many ways, I am still approaching a new bar, and striving to clear new heights, only now the goal is not a medal, but the privilege of caring for patients.

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My Little Green Book

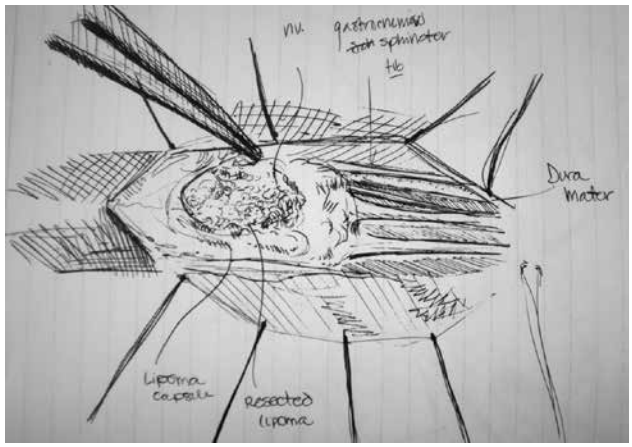
Olivia Heinecke, MS II

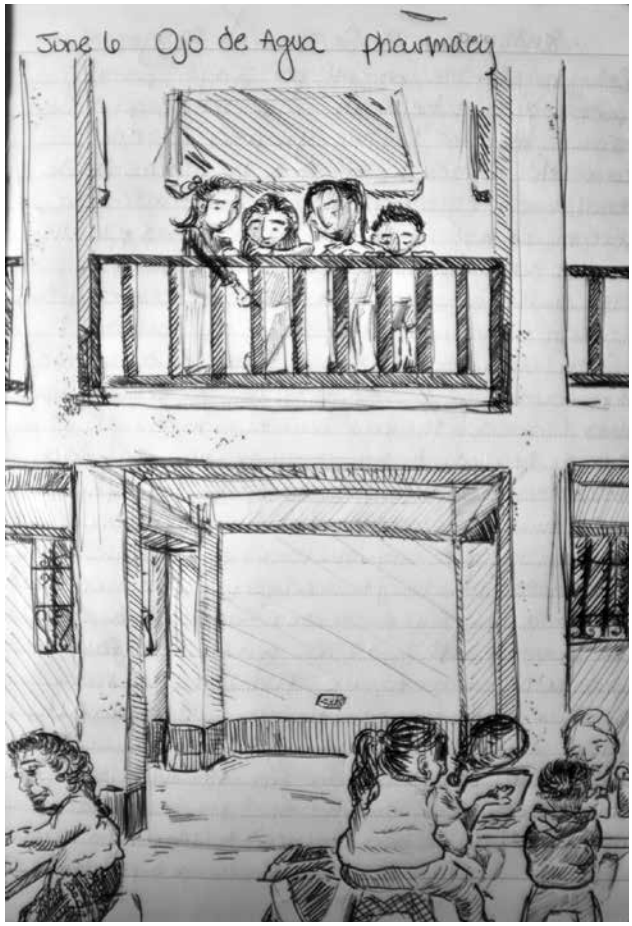
I am standing in a crowded operating room, holding my little green book, painfully aware of the amount of space I occupy. Ducking around foreign equipment and weaving between moving bodies, I try to maintain a neutral existence. A stool is rolled up behind me by the CRNA—presumably out of sympathy—and I sit.

We are all gathered here to witness the removal of a spinal cord lipoma with additional cord untethering. Once everything is in place, the procedure begins. From my corner of the OR, I have a perfect view of the largest screen, where I watch the surgeon carefully peel back the dura mater and expose the lipoma encapsulating the pediatric patient's tiny spinal cord. At this point, I pull out my little green book and start to capture the moment. A technology representative leans over my shoulder and whispers, "Wouldn't it be easier to take a picture?"

Indeed, a photograph would be faster, clearer, and easier by far. However, I have found that photographs are fleeting. They are taken, stored in the cloud, and often never fully examined or internalized. Many, if not most, will go on to live unnoticed in the depths of my camera roll until a great purge sweeps through the memories (AKA I find myself on an airplane with some free time). A drawing, on the other hand, demands attention, participation, and comprehension. With each decisive move by the surgeon, I mimic with an equally intentional stroke of my pen, creating likeness in action. Through this process, I am not just documenting what I see. I can think through it, analyze it, and make sense of it in real time. Ralph Ammer does a wonderful TEDx talk that highlights the value of drawing as a tool for thinking. He explains how illustration externalizes understanding, strengthens memory, and reveals associations that might otherwise go unnoticed. Drawing connects me to the moment, making it indelible. Looking back at my depictions also allows me to return to that instant with a more vivid and familiar recollection.

It is day four of our medical trip in Guatemala. The first days of our pop-up clinic were spent in the lower-altitude neighborhoods around Lake Atitlán, bathed in humidity. On this day, however, our group was carried high into a mountainous community where we set up our clinic in a bustling school overlooking the lake. I worked in the pharmacy, preparing various medications in monthly portions. After setting up, I finally took in my surroundings and noticed the curious children emerging from their





classrooms to peer over the railings at the clinic proceedings below. They pointed, giggled, and waved, running back and forth to catch every angle of our operation. Their overwhelming curiosity even resulted in a group of boys being scolded for peeking over the privacy screen. I thought their inquisitiveness about us exhibited a unique similarity to our work. We were just as eager, interviewing each patient with the intent of uncovering the source of their ailment and finding how best way to mitigate their struggle. From above and below, the room was full of child-like wonder. I captured this moment, not with my camera, but in my little green book, pen in hand, detailing the larger parallel in front of me.

My little green book, at its conception, was not a nicely leather-bound green journal. When I first started observational drawing, I had a black, half-used single-subject notebook that I carried with me to my first surgical shadowing in high school. I filled it with sketches, questions, and details that I wanted to remember forever. What began as a simple notebook has evolved into a tool for learning, reflection, and connection. Whether in the operating room or clinics in Guatemala, drawing has taught me to slow down, notice the small things, and hold experiences in my mind rather than let them pass unnoticed.

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A Stage Without A Curtain

Mackenzie Gustafson, MS III

6,7,8. The curtain rises. My shoulders pulled back, chin raised, a smile finds its place, and I step into the room. The choreography begins.

Every physician knows this dance, though I'm not sure many would call it that. The glide of the stool across linoleum, the measured cadence of questions, the subtle tilt of a head as a patient speaks. I'm still rehearsing it; piecing together the intricate steps. How to knock with confidence but not arrogance. How to introduce myself without stumbling over the word "student". How to nod at just the right moment. How to mask the flicker of panic when my attending interrupts with something I missed. Every motion must be precise and every pause intentional.

It is a performance, though no curtain will ever fall.

Before medicine, I lived in studios with mirrored walls, my days were measured in counts of eight, my body molded by repetition until it became instinct. Ballet taught me that art is hidden in discipline: the hours of barre work that make a pirouette appear effortless; the quiet suffering of blisters hidden beneath satin shoes. Every movement has purpose, every breath is controlled. The audience never sees the scaffolding of sacrifice. They only see the beauty you've trained yourself to carry.

I've found that medicine is not so different.

The exam room is its own stage: fluorescent lights instead of spotlights, antiseptic scent instead of rosin dust. Patients sit in the front row, waiting for assurance, for grace under pressure, for the illusion of mastery even when uncertainty coils in my chest. I am evaluated, corrected, applauded, and critiqued. My audience shifts between attendings, residents, patients and families. Each expects a different performance, each demands composure in chaos, none can afford for me to falter. And so I dance.

In ballet the curtain eventually falls. Costumes are hung in the closet, hair unpinned, face wiped clean. A dancer leaves the stage and with it the identity of the role. To return, finally, to herself. In medicine, there is no final bow. Even as a student, I feel the costume clinging.

Even in moments meant for rest, the role follows. "While I have you..." they begin as I pass the plate at dinner. Texts from distant relatives arrive with CT scan reports rather than the annual happy birthdays. Friends whisper symptoms they are too embarrassed to share with their own doctors. Even before the initials trail after my name, I am asked to play the part.

I used to think this was noble. Isn't this why I wanted to be here? To live in service, to answer whenever called upon, but I am learning the cost. Dancers know the danger of never shedding the role; of rehearsing endlessly, of ignoring the body's limits until joints fray and bones splinter. Physicians also risk the same collapse when the performance consumes the person underneath. As a student I often forget: I must learn to balance before I can pirouette.

Yet both dancers and physicians know why they stay. There are moments of rare beauty that justify the endless practice, the exhaustion, the sacrifice. When a patient looks at me, not my attending, not the resident, but me and says thank you. When I hold a hand in silence, realizing that presence itself can be an offering. When I present a patient's story and feel, for a moment, that I have done it even an ounce of justice. These are ovations, though no applause echoes through the hall.

Still, I wonder what it means to play a role that cannot be hung on the hanger. For a ballerina, identity balances between the stage and the self, each feeding the other but distinct in their own existence. For me, a medical student, that balance already feels blurred. Medicine seeps into the marrow, shaping how I walk, speak, even dream. I catch myself practicing sutures and special exams the way I once rehearsed an arabesque. It's a life of perpetual performance, where art and service are stitched so tightly I'm not sure where one ends and the other begins.

Perhaps that is the quiet tragedy and triumph of this path: to be forever onstage, even when no one is watching.

6,7,8. The lights are always up. The audience is always waiting. And the dance goes on. May I never lose the rhythm, even if the spotlight fades.

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Two Rooms

Mariah Block, MS III

It had been a long day on the labor and delivery floor of our small rural hospital. With only four labor rooms, the unit fills quickly. There's little separation between patients and providers, little separation between emotions too. Every laugh, every cry, every fetal heartbeat monitor feels amplified, echoing down the hall.

That day, two rooms were full. Both held first-time mothers. Both were in labor. But the paths they were on could not have been more different.

In one room, a woman labored with her partner at her side, offering quiet encouragement through each contraction. Her labor had been long, as first deliveries often are, but now we were close. The attending OBGYN stood at the foot of the bed, calmly guiding me. I am a medical student, and today I had the privilege of delivering a baby.

With the OB's steady presence beside me, I supported the baby's head as it emerged, then the slippery miracle of the rest of her body. She let out a fierce, healthy cry that filled the room, followed by the kind of tears only new parents can shed: pure joy, raw and disbelieving.

Their baby girl was here. Pink. Strong-lunged. Alive.

I laid her on her mother's chest, skin to skin, and stepped back. Her mother whispered, "Our baby girl is here," over and over again. The father looked on, beaming. In that small room, joy had a heartbeat.

We didn't linger long.

A nurse popped her head in. "Doctor, we're ready in the other room."

Just a few steps down the hallway. A different world.

The second room was quiet. The patient inside was also a first-time mother, also in labor. She was 33 weeks along, but that morning, she had learned that her baby no longer had a heartbeat.

Fetal demise and breech presentation. She would have to labor and deliver the child she had carried for eight months, knowing the baby would never cry.

Earlier in the day, I'd gone to check on her. She looked up at me and asked, "What does a contraction feel like?" The question caught me off guard. I realized that we were the same age, 24 years old, and that neither of us knew the answer. We were two women, both navigating something bigger than ourselves. But only one of us was doing so through unimaginable pain.

She was incarcerated, which meant no family, no partner, no friend in the room, only medical staff and a silent security guard stationed in the corner. I wondered what it might feel like to grieve under surveillance. I still wonder.

Her chart mentioned past methamphetamine, cannabis, and alcohol use. Whether those played a role in her baby's death, we didn't know. What we did know was that she declined pain medication. Maybe she feared relapse. Maybe she wanted to be fully present. Either way, she labored in silence at first.

But silence eventually gave way to sobs.

The baby was breech. When the body delivered, the head got stuck. She pushed, again and again, crying with each contraction. I stood near her legs, helping to position her, offering a gentle squeeze to her leg or rubbing her knee during contractions, small gestures, attempts at comfort. But what comfort could possibly meet the magnitude of that pain?

I stayed close. I had no assigned task, no charting to do or instruments to hold, just the ability to be present. So I stayed, silently witnessing her heartbreak, trying to offer steadiness in a moment that felt anything but steady.

Midway through the delivery, the attending turned to me and said quietly, "Can you check back on the other room? Make sure they're doing okay."

I stepped out into the hallway and crossed into light.

Back in the first room, the mother still had that look of stunned happiness in her eyes. Her baby girl was now swaddled in her partner's arms. He was rocking her gently, whispering to her, as if the entire world had narrowed to just the three of them. I smiled and offered a few kind words. Everything was going well.

Then I stepped back across the hallway, back into the shadows.

The second delivery was still in progress. The room felt heavier than before, thick with effort and grief. Eventually, the delivery was finished. The silence that followed was unbearable.

The nurses gently wrapped the baby in a blanket and placed her in her mother's arms. I will never forget the look on her face. I will never forget the sound of her weeping.

There are moments in medicine that shape us. We're told this early on, but it's hard to know what it means until you live through one. This was mine.

What happens when birth and death occur side by side? When your scrubs still carry the warmth of one room into the coldness of the next?

I had always imagined the labor and delivery floor as a place of celebration. And it is. But it's also a place where grief can arrive like a wave, sudden and swallowing. Where two rooms, two lives, can be so close and yet so far apart.

Hope and heartbreak can share a wall.

I think often about the woman in the second room. About the bravery it took to labor without support, without medication, without the knowledge of what was coming. I think about her question, "What does a contraction feel like?" and how it dissolved any imagined distance between us. We were the same age, but we live different lives.

She will wake up every morning in a prison cell, grieving the child she will never see grow up, trying to survive one of the most painful things I've ever witnessed.

I will wake up thinking about clinicals, studying, and what to make for dinner.

It's not lost on me that this was not a unique experience. OBGYNs, nurses, and many medical students have stories like this, stories of life and loss, joy and devastation, unfolding within minutes and mere feet of one another.

But this was my first.

And I will always remember.

About the Author:
Mariah Block, MS III, University of South Dakota Sanford School of Medicine.

Abbey Rieber, MS III, 5x8 in painting in watercolor.

This painting serves as a visual representation of the intersection between rural and global landscapes, between Haiti and South Dakota, and in essence, between the mountains and the prairie. By including this piece, we aim to complement the essay on the following page with imagery that highlights the shared paths walked by communities that may be geographically distanced yet share striking similarities in their strength, connection, and perseverance.

The Long Defeat: A Reflection on Paul Farmer and Rural Medicine

Mariah Block, MS III; Ruby Hawks, MS III; Rebecca Hofer, MS III; and Abbey Rieber, MS III

Dèyè mòn gen mòn.
Beyond mountains, there are mountains. – Haitian Proverb

Prologue

In 2003, literary journalist Tracy Kidder published his biography of Dr. Paul Farmer, dubbing him "the man who would cure the world." Founder of the international nonprofit Partners in Health, Farmer spent his career fighting diseases in underserved and marginalized populations all around the world. While his mission took him everywhere from Peru to Russia, his heart always returned to the place it all started: Haiti.[1]

As Pillar 2 students participating in the Frontier and Rural Medicine program, it is easy to see reflections of our rural experiences in Farmer's work globally. Despite being worlds away, similar barriers of poverty, transportation, and access to care face both populations. Both Farmer's work in Haiti and our own glimpses of rural medicine demonstrate the same pattern: there is always more work to do, another patient to treat, another life to sit beside. Beyond one mountain, there is another. However, the apparent futility of the work doesn't diminish it. Instead, it deepens it, proving medicine is less about finishing the journey than walking it, one mountain, one prairie at a time.

Act I: The Mountains

"The physician is the natural attorney of the poor."
– Rudolf Virchow

Zanmi Lasante (est. 1985) is a hospital in the central plateau of Haiti with a mission to serve "women and children, the destitute, and anyone who was seriously ill"[1]. Founded by Farmer, the hospital seeks to provide "preferential option for the poor", prioritizing the needs of vulnerable and marginalized populations.[1] Through community empowerment and radical commitment, Zanmi Lasante has transformed the central plateau, creating the largest healthcare center in Haiti outside the central government. The hospital employs more than 6,300 staff, including 2,500 community health workers, offering primary, maternal and pediatric care, HIV and tuberculosis treatments to the community.[2]

Their mission has not been without challenges. Political instability has halted Partners in Health's work numerous times. Poverty frequently forces women into vulnerable circumstances, increasing risks for contracting HIV. Treatment for tuberculosis requires a strict regimen to avoid drug resistance, but getting the medication is often difficult due to poorly maintained roads, rugged terrain, and unreliable vehicles.[1]

Farmer fought tirelessly to overcome the barriers his patients faced, from working with the WHO to lower treatment prices, to hiking miles into Haitian mountains for home visits, to stealing a microscope from Harvard University to bring back to Zanmi Lasante.[1] He frequently flew sputum samples from Haiti to Boston to run sensitivity tests, and lobbied countless donors to raise funding.[1]

No problem was too big for Farmer, and through his story, we learn the necessity of advocacy as a physician. There is no such thing as asking "too much" when it comes to caring for the marginalized. With creativity, flexibility, and a willingness to prioritize the poor, we can battle inequalities and fight for human flourishing wherever we go.

Interlude

In the basement of the Pine Ridge Reconciliation Center, well-worn couches show the imprints of frequent travelers. We gather around a local artist, seated on his wheelchair in the center of the room. His body is thinned from diabetes and the weight of hard years, and his bag of oil pastels rests under his stilled legs. But his hands still move with purpose.

As he speaks, he draws. Oil pastels smudged across paper, the colors coming alive even under the dim light. He sketches himself not as he is, but as a great chief, strong, upright, eyes steady on the horizon. He shapes the medicine wheel, its circle holding balance and the weight of teachings reaching back further than we can follow. In his drawing, the form of

the White Buffalo Woman emerges, her presence a reminder of renewal.

His stories unfold between words and colors. He doesn't tell the story to teach anything, he just speaks. We listen. Long pauses make us notice our own breathing, moments when pastels scrape louder than his voice. In the telling and the drawing, his stories carry history, land, loss, and survival. The air shifts around those in that basement, and for those minutes, the story belongs to us too.

Act II: The Prairie

"Never underestimate the power of a small group of committed people to change the world. In fact, it is the only thing that ever has." – Margaret Mead

If Haiti gives us mountains, South Dakota gives prairies that are wide, open, and deceptively simple. The prairie seems to promise freedom, but rural clinics and the state's reservations reveal hidden barriers. Those living on Pine Ridge have an average life expectancy of 58 years, 22 years younger than their Caucasian South Dakotan neighbors.[3] Many living in Pine Ridge never make it to their 25th birthday. Across the prairie, access to healthcare is a persistent challenge. Nearly a quarter of South Dakotan women have no birthing hospital within 30 minutes of their home, compared to 9.7% nationally, and countless women must drive hours for prenatal care.[4]

In the face of such drastic healthcare inequalities, it's easy to lose hope. However, both rural and Native American South Dakotans are known for their grit. The traits that may sometimes seem like barriers–stubbornness, pride, the impulse to "tough it out"–also live in our providers. They transform into resilience: "I understand you", "I will travel hours to provide an outreach clinic", and "I will be by your side, so you don't have to face this alone". In this, our attendings teach us bravery. We see the courage to take constant call, to take your profession out of the hospital and into the grocery store, and the reward that comes with the gratitude of our patients and the privilege of lives changed.

Interlude

Friday at 5, the same two tables at the Parkwood Independent Living Center in Pierre become a place of connection. Walkers rest behind chairs and glasses of wine as women pass around lemon bars, crackers and cheese. The stories start before we even sit down. Someone laughs as a woman tells a story about her third husband. Another recalls childhood memories of the sweet piglet that lived down the street until he became dinner. Voices overlap, interrupt, tumble into each other like they've been having one, long conversation for decades.

The stories come out in pieces, carried by memory, shaped by whoever is listening. These happy hour tales aren't just chatter; they're records of lives once lived far away that are now interwoven. There's wisdom tucked in punchlines, and plates of cookies are nudged closer when someone pauses to remember.

Oral tradition doesn't only belong to ancient ceremonies or basement drawings; it lives here too. In the crumbs of dessert on a paper napkin, the clink of glasses, the stubborn insistence of memories refusing to slip away.

Act III: The In-Between

"I have fought the long defeat and brought other people on to fight the long defeat." – Paul Farmer

In medicine, the inevitable result is defeat. No matter how hard we fight, we always end up at death's doorway, at incurable illnesses, at societal inequalities too large to conquer. Everywhere we look, we see the same truth: every treated infection, every appointment attended is temporary. However, the act of returning, despite the inevitability of loss, is where medicine finds meaning.

Farmer once said, "Among a coward's weapons, cynicism is the nastiest of all."[1] Before his death, Farmer was described as relentlessly optimistic, spending his time advocating, writing, speaking truth to power, and always prioritizing his patients. Farmer's mission teaches us about the immense courage needed to have reckless hope, and the profound impact we can have if we choose to deny despair.

Similarly, the prairie teaches us the tenacity it takes to hope. Despite centuries of trauma, the people of the prairie persist. In the face of forces that sought to destroy them, they stand defiantly, telling stories to shape future generations. They remind us to never lose sight of a better future.

Mountains or prairie, the lesson is the same: futility is not the opposite of beauty, it's where beauty lives. It's found in compassion, in consistency, in collaboration that builds bridges. As we look toward our own futures in medicine, we carry this. We have the courage to walk into the long defeat, not because we expect victory, but because the beauty is in the fight itself.

Epilogue

It's midnight on the prairie. In the birthing suite, a woman is bringing new life into the world. The monitors are beeping

softly and there is thunder in the distance, but the only sound that matters is her husband, singing a soft lullaby in Lakota.

When the first cries of a new son echo in the world, he is given an old name, one that hints at cleverness and transformation. In him is the intertwining of the old with the new. Wherever he runs, whether through the mountain or the prairie, he will carry his people's lullaby with him.

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Let me go

Kaihlen Schoettmer, MD

The weight of his body grew heavier,
but his heart was lighter.
Cancer had come,
but it wasn't the illness that marked the end—
it was the quiet acceptance,
the calm after the storm of time spent fighting.
His legs, swollen from a failing heart
that no longer allowed him to walk
A body that had carried him through the world
but could no longer hold his soul.
His family surrounded him,
their eyes full of hope,
but his spirit had already made the journey.
He was tired,
tired of fighting battles he knew he could not win.
"Let me go," he whispered,
"Let me go to her."

For the family he loved,
he made sure they knew
the funeral home's name
The ground assigned

His final request
where his money would go.
"St. Jude's," he said.
"Those kids need it more than I ever did."

He was ready,
not for a battle,
but for peace.

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Withered Leaves

Alex Kracht, MD

All it takes
is a breath of cool air—
the last leaf, brittle and thin,
lets go of its hold,
drifting softly to the floor of the waiting room,
as though it knows something
the others do not.

The patients with eyes shifting wonder—
can I trust a doctor
who cannot keep a plant alive?
Surely, this is a simple thing to fix—
a little water,
a little sun.
Surely it is not as complicated
as the ailments we bring.

But the plant,
unlike so many of us,
cannot be healed by kindness.
It will not rise with a warm word,
or the comfort of being seen
in the way we long to be seen.
It needs more,
and sometimes,
we do, too.

The doctor is caught in the undertow of time,
no moment to spare
for the small green thing in the waiting room,
no breath for stillness
when there are charts to read,
messages to answer,
battles to fight with unseen forces.

So, when you choose a physician,
look past the withered leaves.
Do not mistake them for carelessness,
or for someone too lost
in the warmth of their own striving
to notice the quiet ways
life slips away.

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Magic Tricks

Catherine Stone, MS III

You tell me to be two
To hang up the white coat for the night,
To walk away unscathed, unbothered
By the tears and the blood and the anger,
By the smiles and the hugs and the nods
That have crashed over me all day.

You tell me to be two
Don't carry it home,
Don't let empathy hollow you.
And in learning this new skill,
I feel like a novice magician,
Practicing illusions to survive another day.

You tell me to be two
So today, we'll start with an old trick:
Sawing a person in half.
It's a simple task, not to worry—
A sleight of hand,
And you can split yourself right down the middle.

You tell me to be two
Simply make the separation,
Split the deck of cards.
But there's no instruction manual for this.
Do I create a new self entirely,
Like pulling a coin from behind an ear?

You tell me to be two
And the dissolution becomes natural
As I master the act of making sorrow, anger, fear
Disappear in a vanishing act as the curtains close.
Yet still conjure kindness,
Like pulling a white rabbit from a hat.

You tell me to be two
So at the day's end,
I shut a part of myself away,
Emotions sealed behind a door.
But some nights she knocks,
And I can't help but answer.

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From Shampoo to Systems: Advancing Equity in Patient Care

Madeline Vagts, MS III

In some of my years before medical school, I spent my time combing mats out of patients' hair as a nursing assistant to restore dignity and a sense of self. I carried that passion for patient hygiene into my proposal for the Compassion Ambassador Program through the T. Denny Sanford Institute for Empathy and Compassion at the University of San Diego. Around the same time, the Health Equity & Experience Council at Sanford USD Medical Center was looking to pilot a project addressing hygiene for patients with textured hair. This collaboration led to the creation of the Inclusive Hygiene Kit—a collection of products designed specifically for patients with textured hair and melanin-rich skin.

For many years, hygiene products were formulated for straight hair and white skin, thus becoming the default. What began as products for white people became the multipurpose products for all ~ shaping what was stocked on hospital shelves, prioritized in hospital budgets, and supported by hospital supply chains. This narrow focus led to a lack of inclusive hair and skincare items needed to prevent matting hair, hair breakage, and dry cracking skin for those with textured hair types and dark skin tones. Lack of products, access, and sometimes training reinforces the idea —intentionally or not—that inclusive needs are less important. This gap in representation in the most basic elements of patient care reflects a larger issue in equality and inclusion in the healthcare system.

Finding solutions to the racial inequalities in the healthcare system is a daunting task, especially for individuals who may have minimal exposure to these topics. What happens if you use conditioner for curly hair on straight hair? Why does a wide tooth comb work better on textured or curly hair? What are the physiological differences between black and white skin types?

Addressing inequality to provide the best patient care is complex and requires awareness, education, and access. However, taking the first step can be as simple as adding a new type of lotion to the supply closet.

Individuals with textured or curly hair have unique hair care requirements due to the structure of their hair. The key to promoting optimal hair health is hydration. The natural coils or kinks in the strands limit the spread of sebum (the scalp's natural oils) down the entire shaft of the hair strand; these oils play a key role in protecting hair from friction and breakage, supporting length retention and overall hair health. The multipurpose products often seen in hospitals may over-strip textured hair of its natural oils which can lead to dryness, breakage, and permanent damage over time. In contrast, hair care products designed for textured hair often contain ingredients like coconut oil, shea butter, and vitamin E—substances that mimic the scalp's natural oils. While these haircare products are ideal for curly or textured hair, they may cause product buildup on straight hair, creating a greasy appearance, further underlining the importance of hair products for specific hair types.

Without essential tools like wide-tooth combs, I frequently struggled to care for patients' hair, spending hours working through knots as a nursing assistant. For those with coarser hair, lack of available protective hair tools such as bonnets and wide-tooth combs can lead to mechanical breakage. Bonnets are especially important for hospitalized individuals, as bedbound patients spend most of their time with hair rubbing against the cotton pillowcase. Over time, the friction between the hair and cotton sheet causes damage, tangling, and even matting, especially in textured hair types. Bonnets provide a protective barrier against friction on the hair. Wide tooth combs play an important role in the management of textured hair by limiting the mechanical stress on each individual strand while safely removing knots. Furthermore, wide tooth combs protect the coil pattern by not over stretching individual hair strands while combing.

In my experience, hospital lotions often leave patients' skin dry again within minutes; the quality of the lotion, however, makes all the difference. Just as textured hair requires specific tools and products to maintain its health, Black and brown skin have distinct physiological needs which must be considered in routine skincare. Ceramides – the lipids which help the skin retain moisture – are often less abundant in melanin-rich skin, which predisposes to dryness. In the absence of quality moisturizers and lotions, dry areas of

skin may become uncomfortable, itchy, and possibly appear dull. To support healthy skin, moisturizers with ceramides, humectants (like glycerin or hyaluronic acid), and occlusives (like petrolatum) are used.

As I learned about the importance of specialized shampoos, lotions, bonnets, and wide-tooth combs, I often thought of how many of my past patients would have benefited from access to something like the Inclusive Hygiene Kit. Yet I still found myself asking: *Why me?* As a white person with straight hair, I questioned whether I had the right to advocate for inclusive hair and skin care. *Could I truly understand the experiences of those with textured hair or darker skin tones?* I came to realize that my role was not to claim expertise in their experiences, but to listen, learn, and help address the gaps in care where systemic barriers persist. Recognizing the diverse care needs of patients is the first step toward meaningful change. Being a compassionate physician means sitting with discomfort, recognizing privilege, and using that awareness to provide equitable healthcare.

The push for equitable products did not begin with me; it comes from generations of People of Color fighting for recognition of their needs within medicine. I hope that this project may be one small step in amplifying that work. The Inclusive Hygiene Kit at Sanford USD Medical Center in Sioux Falls is currently available, including shampoo, conditioner, wide-tooth comb, lotion, and bonnet. Health equity goes beyond the medical diagnosis—it lives in the shampoo on the bedside table and the comb in the care kit.

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Finding Confidence in the Evidence

Lauren N. Zimny, MS II

I'm struggling to pay attention to the speaker on stage. He's telling us a story about his time in medical school, but I'm only half listening. All I can seem to focus on is how behind I am compared to the rest of the medical students at this conference. I can't remember why on earth I even bothered attending this. It is only the end of the first day, and I can tell that I am not cut out to be here. Just as I am getting ready to fight tears in my own self-pity spiral, I am pulled back to reality by the voice coming from the stage. "Since you are all scientists," he says, "let me put this into language you'll understand." He seems serious about whatever point he is trying to make. I really wish I had been paying attention. He continues, "The evidence-based answer is that you," he pauses and looks around the room, making brief eye contact with me, "are freaking awesome." I tilt my head, slightly confused, and listen carefully as he elaborates on what exactly he means by that. He now has my full attention.

The speaker proceeds to describe his time on medical school admissions boards, residency selection committees, and in many other prestigious selection roles. He describes the rigor they put every medical school application through and the painstaking detail with which they comb through applicants' essays and qualifications. He makes it crystal clear that no one gets into medical school by accident.

I gaze around the room as he continues to elaborate on the lack of luck involved in matriculating. I can't help but notice the nodding heads and teary eyes that fill the room. As I look around the conference room, full of medical students from across the country, I can see tension slowly release from a multitude of shoulders as the speaker assures us we all deserve the seats we are in. I can't speak for the rest of those conference attendees, but for me, I often replay that speech when self-doubt starts to outcompete the other thoughts in my mind.

Fast forward a few months, and that quote still sits above my desk. I strategically placed it there so that every time I begin to question myself or the progress I'm making, I can be reminded of just how much I've done to get to where I am today. When I start to question my ability to succeed, I take a moment to reflect on all of the accomplishments that have prepared me for the challenges I am facing currently and the hardships ahead. I may never fully cure my imposter syndrome, but I can definitely manage it by leaning into the evidence.

I often think of what that speaker said about how I didn't get to where I am by accident. I consider the qualified, accomplished, intelligent people who carefully examined my application to medical school and determined that I deserved a seat in my current class. I reflect on the list of extracurriculars listed on that application, the honors I've been granted, and the awards I've received; they all serve as evidence of what I am capable of.

When I look around at the intimidating people I feel unworthy to be surrounded by, I remind myself that I was chosen to be among them. My position in this revered group is not by accident, but a direct result of my own actions, through years of hard work and dedication. The only thing clouding that is the fact that the work is not yet done. I cannot let the climb ahead of me distract from the progress that's been made. To maintain confidence for the journey ahead, I will pause now and then to reflect on the evidence of how far I've come, the feats I've accomplished, and remind myself of what the evidence suggests: "I'm freaking awesome."

I share all of this in hopes that others can find solace in this way of thinking as well. If you're reading this, I encourage you to reflect on the evidence that supports your own awesomeness. I guarantee there is plenty. As healthcare professionals, we are constantly striving to provide the best evidence-based care for our patients. We are trained to question, analyze, and trust only the evidence. Let's use that same evidence-based approach to care for our own mental wellbeing. What does the data say about you? The data says you're enough. More than that, you're freaking awesome.

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Blood, Mud, and Medicine

Alexander D.M. Withrow, MS III

There are places in this country where time seems to fold in on itself, where the past doesn't just linger in the corner, but fills the entire room. Wagner, South Dakota is such a place. The town sits on the prairie like an old bull buffalo: stubborn, scarred, and impossible to move. In the dead of winter, when the sun falls below the horizon, the wind starts to roll off the Missouri with the chill of ancient times.

I grew up riding down Highway 50 with my family to visit Wagner. My mother was raised on a small hog farm just outside of town, and every Labor Day, we returned for the carnival. The bright lights flickered in the dusk, the smell of corndogs and diesel smoke hung thick in the air, and sometimes, when the wind was right, you could hear the warm, familiar crackle of the old loudspeakers carrying the rodeo announcer's voice across town.

It wasn't until I returned to Wagner on a rural rotation in medical school that I realized just how little I actually understood about the town.

Wagner sits at the edge, geographically, historically, and medically. The hospital is small, staffed by just two physicians and a handful of APPs. The building is being redone, with half of it still showing wear-and-tear caused by generations of boots and burdens. This is frontier medicine. There are no specialists waiting in the wing, no cath lab humming and ready for emergent thrombectomies. Just a handful of people doing what they can with what little they've got, keeping the doors open so their town doesn't go without care. I chose to go to Wagner to return to my roots. What I found was a lesson in how to practice medicine where suffering doesn't knock, but rather walks in and asks for a blanket.

Throughout medical school you hear stories about healthcare on reservations, the struggle with addiction, poverty and isolation. But the stories don't bleed through gauze, or waft the odor of infected wounds. Patients with hearts hypertrophied from years of uncontrolled hypertension.

Diabetes so severe that thirty-year-olds have kidneys barely hanging on, and others lose limbs in their twenties. The weekend before my rotation started, the hospital had two gunshot wound patients come into the ER by private vehicle. No sirens. No heads up. Just blood-soaked seats and silence. The kind of silence you only hear when a loved one is dying in the backseat.

On my final night in Wagner, winter was still clenching its frozen jaws tight around the prairie. I was walking into the high school gym to watch the girls' basketball game. Half the town was seemingly packed into the bleachers, the smell of popcorn wafting from the concession stands. The scene felt like something out of a small town movie. It was then that my phone rang. An ambulance was bringing a patient into the ER.

I quickly crossed the street to the hospital to find one patient already waiting. He was withdrawing from alcohol, disoriented, shaking, sweating and pleading for something to take the edge off. The sirens rang out as the ambulance arrived bringing in a patient clutching onto their chest. We worked fast; wires, labs, oxygen, nitro. The patient had fear in their eyes while they gripped onto the bedrails as if hanging over the edge of a cliff.

Just as things were beginning to settle down, another ambulance arrived. Another chest pain, another bed, and another life clinging to a breath. Having already filled both ER beds we were tight on space, and tight on time. Before we could get this patient settled, the radio crackled: a girl was found passed out drunk in a parking lot covered in mud and left behind.

She came in soaked and half-frozen, her jeans stiff with ice and the black South Dakotan soil. Her lips were blue and she was responsive only to pain. It had been a brutal winter with subzero temperatures, violent wind, and snow piled up along the roadside. We cut our way through her wet clothes, wrapped her in warm blankets and started the bair hugger. Her skin felt as cold as granite and her breath came in short shallow bursts.

As the night stretched long into the morning, we triaged and stabilized, monitored and mourned. We worked in near silence, worn thin but too wired to rest. No one wondered how it had gotten like this. We already knew.

By the time I was stepping outside, the eastern sky had begun to soften. My boots crunched as I walked over the frostbitten gravel. I could see my breath as I exhaled slowly. Somewhere out of sight a dog barked once, then all was quiet. The world, just for a moment, was still.

Wagner is not the kind of place most people think about. It doesn't make the news or find itself in travel brochures. But it's where I learned what medicine really means. It's not about pristine facilities, the letters that accompany your name, or the money you make. It is coaxing the warmth back into the frozen hands of a child as the heart monitors are beeping in the next room and the winter wind howling outside. It's about the blood on your sleeves and the glimmer in patients' eyes as they shift from fear to hope. It's standing shoulder to shoulder with people who face that fear head-on and together, usher the sunlight in.

Some nights when the world around me has gone quiet, I still hear the faint, ghostly crackle of the radio.

This is medicine. This is South Dakota.

To protect privacy, certain details and identifying characteristics have been altered.

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Finding Humanity in Rural Medicine: Where Care Meets Community

Bailey Smith, MS IV

Author's note: This reflective memoir draws upon my experiences growing up in a rural ranching community and my time as a medical student as part of the Frontier and Rural Medicine (FARM) program in rural South Dakota. It explores how patients' choices, shaped by identity, resilience, and community, reveal the humanity at the heart of rural medicine.

The closest hospital is 45 minutes away from my parents' ranch where I grew up, down gravel roads lined with endless fence lines and frequently impassible in inclement weather. Growing up on a ranch, this distance was not remarkable; it was simply life. Injuries were treated at home whenever possible, and trips into town were saved for more serious events. Because daily responsibilities and workload determined when care could be sought, medical conditions were left untreated or sometimes delayed until a more convenient time, such as after calving, after harvest, or when the roads were cleared. These long distances taught me early on that patience, resilience, and the choices people make are integral to rural medicine.

I carried this perspective with me to medical school, but it wasn't until I returned home through the Frontier and Rural Medicine (FARM) program that I began to see rural medicine through a new perspective. Not far from the ranch where I grew up, I spent a year completing clinical rotations in a town of 2,900 people. Being close to home allowed me to reflect on my rural upbringing while also learning from patients whose lives reflected what I had known as a child. In them, I recognized the same qualities I had seen in my family and neighbors: a sense of identity, resilience, and resourcefulness.

My patients' stories reminded me that when we consider health care in rural communities, we cannot simply think about laboratory results or imaging findings, but rather navigating illness within the realities of distance, weather, work, and community. Throughout the year, I realized that patients' decisions were often driven less by medical urgency and more by their identity and responsibilities – uncertainty during calving season, responsibility during harvest, commitment to the community, or the need to finish chores before seeking care. Choices influenced by the rural way of life revealed a kind of humanity that cannot be captured in a chart or checklist. They reminded me that medicine is not only about the science of treating disease but also the art of understanding people in the context of their lives and without losing sight of the values underlying every choice. During my time in the FARM program, I met numerous patients whose stories included these principles. The following three reflections highlight experiences that deepened my understanding of the humanity of medicine in rural communities, showing how care extends beyond the clinic to encompass choices, values, and the realities of daily life.

When Life Guides Medicine

One patient was diagnosed with prostate cancer, and surgery was recommended. The safest option would have been to refer him to a facility three hours away, as the outreach urologist could not perform the surgery locally. This patient ultimately decided to postpone surgery and wait until winter to possibly consider treatment options. It was harvest time, calving season was approaching, and these responsibilities outweighed a cancer diagnosis. He was worried that surgery and recovery beforehand would prevent him from completing his responsibilities.

At first, it seemed like a risky choice. As I listened, I began to learn that the choice was not a denial of cancer but a prioritization of family, livestock, and the work that defines his lifestyle. His life was not defined by a timeline surrounding a surgical intervention, but by the meaning and purpose he receives from being able to do the things in life that matter to him. The humanities reminded me to honor the humanity in his decision, recognizing that care is inseparable from the life it intersects.

Duty Before Diagnosis

One evening in the emergency department, a rancher walked in with broken ribs and a small pneumothorax after being pinned between a fence and a heavy gate by a cow. Despite

the pain, he spent the afternoon finishing working cattle and completing evening chores before seeking care.

This interaction revealed a deep sense of responsibility and duty. His story reflects the mindset and identity inherent to the rural farming and ranching lifestyle, where obligations and work often come first. This mindset is shared by many others in the community. In this choice, I saw the connection of duty, identity, and humanity. Care is most meaningful when it meets people where they live, not just where they are treated.

Community as a Source of Healing

Another lesson came not from one individual, but from an entire community. Before I began my FARM rotation, a young girl from a local farming family had been diagnosed with cancer and the news spread quickly through town. During my time in the community, I witnessed the community response: neighbors organized horse trail ride fundraisers, benefit walks, and silent auctions. As her health declined, community members prepared meals and provided support to her and her family without being asked or needing anything in return.

While in a hospital setting, treatment plans can feel limited to the space of the hospital. In rural medicine, however, healing often extends beyond the hospital and is carried by the support of the community. Watching a community come together reminded me that medicine is never practiced in isolation. Bringing comfort to a patient or their family involves more than procedures or medications; it is combined with the human desire to help carry burden, provide hope, and turn compassion into direct service for others. In this community, I saw that humanity in medicine is expressed through a combination of clinical skills, empathy, and the choices people make to care for one another.

Reflection and Connection

At first, the patient decisions I observed in rural medicine seemed like barriers to care. However, the humanities encouraged me to think deeper about these choices and appreciate the context in which they were made. A harvest represents livelihood. A trail ride reflects solidarity. A day's work completed before seeking ER care demonstrates resilience and identity. The humanity of rural medicine comes through in these realities. Medicine is about treating disease, but it is also about honoring the values and priorities that guide decision-making with patients.

As someone who grew up on a ranch, distance, unpredictability, and dependence upon neighbors were a common feature of rural life. I returned near my hometown as a medical student to find these same realities reflected in the patients I saw. Through the FARM program, I observed care extending beyond the hospital, encompassing daily life, duty, and compassion. To understand the humanity at the heart of rural medicine, it is important to understand the values that define farming and ranching communities.

As I look ahead to a career in urology, I hope to carry these lessons with me. Technical skill matters but so does seeing the person behind the diagnosis. Treatment occurs within the context of patients' lives, shaped by their values, responsibilities, and resilience. The humanity of rural medicine reminds me to honor these realities, offering care that prioritizes patients and their lives, rather than solely treating diagnoses. These experiences will shape how I practice medicine, balancing treatment with empathy, listening for the stories behind each decision, and providing care that reflects both science and the lives it touches.

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Dear Dr. Barwari: A Letter From Your Past Self

Helean Barwari, MD

Dear Dr. Barwari,

I hope you still remember what it feels like to be new at this,
to look up to your attendings, to learn from them.
Because one day, a med student will look at you the same way,
and the way you practice – with kindness, with compassion
may shape the kind of doctor they become.
You never know who you might inspire to lead with humanity,
just as someone once inspired you.

I hope you still take the time to explain things
not just to the patient who is scared and confused,
or the student who is also likely scared and confused,
but to the family whose world has been turned upside down.
Your words can offer comfort in uncertainty, stillness in chaos.

You know not every diagnosis comes easily.
When a patient's body won't cooperate, and the tests come back normal,
do you still listen to their fears, still believe their symptoms?
Do you remember that "nothing" on a scan doesn't mean nothing to them,
and that the silence of a negative result can feel deafening?

You won't always get it right.
Medicine will test you, push you, wear you down
but never let it take your heart.

And if at times doubt whispers in your ear,
remember why you started.

I hope, even on the busiest days, you don't forget
that while this is your everyday, for them, it's anything but.
So listen closely, speak gently, care deeply.
Your presence makes all the difference.

Your heart will stay with them long after the visit ends.
Because in the end, it's not the hours or the medicine they'll remember
– it's you.
Medicine may save lives, but humanity gives them meaning.
So if you lead with kindness, you'll be the doctor you always wanted to be.

Sincerely,
The one who dreamed of this moment.

P.S.
Don't forget to be nice to your nurses

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The Second Half of the Call

Nathan Ochsner, MS II

The pager beeps, and the world goes silent. "Ambulance, you are dispatched to a tractor rollover." At the time, I didn't know this call would change the way I understood healthcare. Emergency Medical Services (EMS) is a demanding field. It takes months or even years of EMS training to prepare for long call hours and high-stakes situations: car accidents, gunshot wounds, strokes. Some enter EMS as a lifelong profession; others, like me, join for experience on the path to medicine. Regardless of motivation, one thing unites us: when the pager goes off, we must be ready for anything.

I became an EMT through a school-supported program in high school—a rare opportunity that allowed me to train without the usual financial burden. As a senior in high school, I was learning how to manage trauma, check vitals, and assess emergencies. The training was intense and fast-paced, but nothing could prepare me for the emotional weight of my first call.

After completing EMT training and graduating high school, I applied to volunteer with an ambulance service in South Dakota. The service consists of about 15 members, including EMTs and paramedics. We are a rural municipally owned and operated service that covers approximately 189 square miles with three towns and parts of a fourth. One summer, I vividly remember responding to a tractor rollover. Initially, there was a dispatch error—although the call was in our jurisdiction, it was mistakenly sent to another service. As a young and inexperienced EMT, I assumed it no longer involved us. While I was doing chores around the station, a medic rushed in to tell me the call was indeed ours, and we needed to move quickly. We raced to the scene. I remember feeling excited—it was my first trauma case. I pictured myself treating the patient, getting them to the hospital, and later hearing of their miraculous recovery. Like the stories we see on TV. But life isn't Hollywood. When we arrived, the patient was pinned under the tractor, part of the machinery crushing his skull. There was nothing we could do. We declared him deceased within minutes. The excitement I had at dispatch vanished, replaced with a deep, heavy heartache. I wasn't emotionally prepared for what came next—but I knew our job wasn't over. That was when the second half of the call—the harder half—began.

The patient's family had already arrived, notified by police and the county sheriff. We moved the body into a bag and transferred it to the stretcher. As we approached the family, I could hear their grief growing louder. My own heart pounded. I wasn't sure how I would handle the moment. My lead paramedics stepped forward and spoke first. The family asked questions, slowly processing the loss. We stayed with them, answering what we could, offering space and time to say goodbye. Though the grieving process took time, it was necessary. We remained present until the family was ready to let go.

This call is one I will remember for the rest of my healthcare career. It was my first trauma case, and it taught me an invaluable lesson in empathy—and in how to comfort those left behind. Patients often come to physicians during some of the scariest moments of their lives. It's easy to forget how frightening illness can be when you're focused on diagnosing, treating, and moving on to the next case. In that process, families can be unintentionally overlooked. Rural EMS taught me to slow down and prevent that from happening. Our ambulance service is sometimes called just for a lift assist. As much as we might want to leave after helping the patient to the couch or bed, we always make sure they're truly okay—not just medically treated. I've brought patients water, fetched snacks, or retrieved medications to prevent another fall. These small moments—the glass of water, the conversation by the bedside—taught me that healing isn't always clinical—it's human. And those quiet acts of presence are often the ones people remember most. Physicians may not perform those same personal tasks, but they can ensure their patients' overall well-being is addressed. That might be as simple as asking about their support system, offering a smile, or simply showing a heartfelt commitment to their care—or as complex as coordinating home care. Most of us entered healthcare because we wanted to help people. We need to hold on to that purpose—and remember: we are not just treating patients. We are caring for people.

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On My Way

Kiley Medler, MS III

This past July marked the beginning of my third year of medical school– a natural time to reflect on my journey in medicine so far. When I reflect, I can't help but think of the white coat ceremony: a day filled with excitement, anticipation, and a sense of accomplishment. For me, putting on the white coat symbolized a commitment to learning—not only the science and intricacies of the human body, but also the humanity and ethics that define patient-centered care. There are many honorable traditions in medicine, but the white coat ceremony marked the beginning of my place in medicine, a new chapter of my story.

This year I encountered another tradition in medicine- one I didn't learn from a textbook or a clinical rotation, but from a much more personal place: as a family member of a patient. My second week after starting clinical rotations I got off of a long, busy day in the pediatric inpatient unit. When I got to my car at the end of the shift, I called the one person who has always been there for me- my best friend, my mom. She had just gotten test results back from her doctor. I remember being in complete disbelief as the words left her mouth: **"I cannot believe it. I have breast cancer."**

She went through her journey with strength, dignity, and grace, and I am so incredibly proud of her. I can't imagine what it's like to go to radiation every day for weeks on end. At the completion of her radiation, my mother rang the bell– a long-standing tradition for patients completing treatment. As I watched her, I found myself wondering: *Why do we ring the bell? What does this tradition mean? Where did it come from?*

Curious, I looked into the origins of this tradition, and what I found made it even more meaningful.

This ritual began in 1996 at the MD Anderson Cancer Center. When U.S. Navy SEAL, Irve Le Moyne, was undergoing radiation therapy for head and neck cancer, he told his physician, Dr. Kian Ang, that he planned to follow a long-time Navy tradition at the completion of his treatment. In the Navy, the ringing of the bell signified a "job done". On the last day of radiation, he brought a brass bell with him. After his last treatment, he rang the bell several times to signify the job done, and left the bell as a donation. The bell was mounted to the wall next to a plaque with the inscription:

Ring this bell
Three times well
Its toll to clearly say,
My treatment's done
This course is run
And I am on my way!
–Irve Le Moyne

The tradition of ringing the bell quickly became a symbol of perseverance and closure, a job done. At first it was adopted by other head and neck patients after completing treatment, and then it spread to other treatments like completion of chemotherapy and even stem cell transplants. Now, the ringing of the bell is a ritual beloved and celebrated nationwide.

As I continue on my way through medical school I am reminded that medicine is one of the greatest professions for the celebration of the human spirit, exemplified by the tradition of the ringing of the bell.

To those still on the path to the bell, I hope you find your way.

To those who have rung it—congratulations. You are on your way.

And to those who never made it to the bell—you are not forgotten.

To my mom– I will always be with you on your way.

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A (Brief) History of *Pathos*, A Briefer History of *Pathology*

Ellie Gubbrud, MS III

Author's note: This is a short essay I put together using my Classics and medical education. For context, I majored in Classics and studied Ancient Greek for four years in college, and the idea for a humanities submission got me thinking about those two things are related.

In medicine, we discuss *pathology*—the study of disease—without much thought to its etymology. But if you trace back the lineage of this clinical term, you may be surprised at what you find. *Pathology* is a term rooted in the Greek word πάθος (*pathos*), a word that has traveled through centuries of literature, tragedy, rhetoric, and philosophy, accumulating a plethora of meanings along the way: suffering, emotion, misfortune, and persuasion, to name a few. It's a word born from pain, tragedy, and poetry, and that got me thinking: what does that tell us about the role of *pathos* in medicine today?

The Merriam-Webster dictionary defines the word *pathos* as such:[1]

1. an element in experience or in artistic representation evoking pity or compassion, or
2. an emotion of sympathetic pity.

Similarly, the Cambridge dictionary defines *pathos* in the following terms: *the power of a person, situation, piece of writing, or work of art to cause feelings of sadness, especially because people feel sympathy.*[2]

Like many English words, *pathos* comes from Ancient Greek. Its origin lies in the noun πάθος (*páthos*, pronounced the same as its English cousin), which itself originates from the verb πάσχω (*páskhō*, "I suffer" or "I experience"). Forms of πάσχω appear as early as Homer in the 8th century BCE—for example, Odysseus is described as having "suffered many pains in his heart upon the sea":[3]

πολλὰ δ' ὅ γ' ἐν πόντῳ πάθεν ἄλγεα ὃν κατὰ θυμόν
Pol·là d' hó g' en póntō páthen álgea hòn katà thymón

While πάσχω appears in Homer, the noun πάθος does not. It emerges later in the work of the three great tragedians of Athens: Aeschylus, Sophocles, and Euripides, and is typically translated as "what befalls a person": a tragic fate, a state of misfortune, or a deep emotional pain. In these 5th century BCE plays—such as *Persians, Orestes* and *Electra*—πάθος explores not just what happens to someone, but how it is felt.

It isn't until Aristotle (384-322 BC) that πάθος begins to take on a definition closer to its modern English descendant. In *Rhetoric,* he states:[4]

τὰ πάθη ἐστὶν ὅσα μεταβάλλοντες διαφέροντες πρὸς τὰς κρίσεις
"Emotions (πάθη) are those things through which people alter their judgments".

Here, πάθος is not just a word for suffering, but a tool of persuasion—one that a skilled speaker must understand intimately. What is an audience feeling? What makes them feel that way? For Aristotle, emotion is not a distraction from reasoning, but an influence upon it. To invoke emotions in others—anger, fear, pity, confidence, etc—is to move them to your side of an argument. Πάθος becomes *pathos*. Suffering becomes emotional persuasion.

About five centuries later, the physician and philosopher Galen (129-216 AD) gives πάθος another meaning: physical affliction.[5] Galen refers to πάθος as a medical condition: something that has gone wrong in the body. In *A Method of Medicine to Glaucon*, he writes:

τοῦτο τὸ πάθος, ἐν αὐτῇ τῇ ἀρχῇ ὂν, πολλάκις ἐθεραπεύσαμεν
"This affliction (πάθος), when it is at its very start, we have often been able to heal it."

This leads me to a question that has always struck me as odd: why *pathos*? Why is the term we use in modern medicine for the study of disease—*pathology*—rooted in a word that means tragedy, emotion, and affliction?

The answer to that question is complicated, and the linguistic trail—from πάθος and λόγος, (a word pronounced *logos*, and with even more variable meanings than its counterpart: words, reasoning, explanation, and many more), to the compound παθολογία, to the Latin *pathologia*, and from

there to the familiar *pathology*–is long, winding, and beyond the allotted word count. So instead, I ask again: why *pathos?*

Consider Hippocrates (c. 460-370 BC), an Ancient Greek physician from the island of Kos, often called the Father of Medicine. He has over 60 medical works attributed to his name. Not one uses πάθος to mean disease. Instead, Hippocrates consistently uses νόσος (*nósos*), the Greek word that strictly means sickness, illness, or plague. You can still see this root today in terms like *nosocomial infections* (those acquired in hospitals) and *nosology*, (the classification of diseases).

So, once more: why *pathos*?

Perhaps we call it *pathology* because treating illness is never just about healing the body, but confronting the human tragedy that comes with it; perhaps it's because our emotions are what persuade us to care. Or maybe, as with many things, pathology has its name because a few Renaissance scholars thought it sounded nice.

Either way, your λόγος is sound.

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msitamuehRRheumatism

Marilee Kneeland, MD

It isn't murdrum but it will drive you crazy

Reviver of evitative melody,

No civic deed inspired this time.

My joints refer an echo,

Non-sounded,

Tenet to a redder trek, an eve

Did bring the tides that eke out an endless

Ebb of foamy flows, SOS,

Radar reverberations calling back to me.

They bob, they swell,

They break–eye upon the sea:

One day sees silent, peaceful shores,

The next, a tempest rises, roars.

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Author's note: While on a rheumatology rotation in medical school I met a patient with palindromic arthritis. This condition causes sudden, unpredictable and disabling bouts of arthritic pain. In keeping with the condition's name, I incorporated palindromes throughout my poem, which are words or phrases that read the same forward or backward. The term "palindrome" derives from ancient Greek meaning "running back." Examples are "madam" or "racecar." There are 15 palindromes throughout the poem, used disjointedly and reminiscent of a coalescing nightmarish and inescapable song.

Souls Touching

Phebie Rossi, MS III

A hand held.
A shoulder squeezed.
An ear given.
A visitor may I be.

No family in sight.
Eyes looking up bright.
Stories shared
in daylight.

Your arm points out the window,
school children passing to and fro.
No medicine can slow the years
and yet, I sit and hear.

Sadly now,
it's my time to go.
May tomorrow bring you
another hello.

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Full Circle: A Journey from Patient to Healer

Brooklyn VanDerWolde, MS III

A child of twelve, unaware what lay ahead,
"You'll need X-rays," the nurse warily said.
A routine exam stretched unbearably long,
Yet no one explained what had gone wrong.

Endless waiting, confusion and fear,
Until Sanford's castle slowly drew near.
A white-coated man, both steady and kind,
Held up two screens, their images aligned.

"This one is normal," he softly explained,
"But this one is yours, where things are strained."
He spoke of her care, the steps they would take,
And calmed her fears with each promise he'd make.

"I'll be with you," he assured her, "step by step.
In one month's time, in the OR, we'll prep."
The ICU lights greeted her groggy return,
Each day brought new trials, new lessons to learn.

Day one: with coaxing, she sat up in bed,
Each movement a battle, her body like lead.
Day two: four strangers, persistent and kind,
Urged her to rise, though she cried and declined.

Through trembling lips, she whispered, "Please, not today,"
But deep in her chest, hope paved the way.
Fast forward a week, she's pale and thin,
Yet strength finds a way to creep back in.

She paused by a nurse, her dad by her side,
"I'd like to show you," she said with quiet pride.
No hesitation, just grit and grace,
She shuffled to the stairs, her IV in place.

Step by step, her triumph was clear,
Home felt closer with each stair near.
She turned and smiled, fragile but mended,
"Thanks for your care," her journey ascended.

Though years passed by, the memory remained,
Of pain endured and strength regained.
The care she received, the lives she saw healed,
Lit a passion inside, unwavering, sealed.

Now fifteen years later, she's donned a new coat,
With knowledge and kindness etched into each note.
A medical student, dreams full of light,
Guided by care, her heart burning bright.

Her journey full circle, she stands to repay
The hands that healed, that gave her this day.
For the child she was, scared and unsure,
She now stands as the healer, steadfast and secure.

About the Author:
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A Hospital Visit

Jerome W. Freeman, MD, FACP

Thomas liked Josie. A lot, he thought. But it had become harder since graduation. Josie had another year of high school. A long time for something to happen. As far as Thomas could tell, Josie didn't have a steady boyfriend. But she always got a lot of attention. During last summer's parties at the Drop-Off, it seemed like there were always two or three boys around her, trying to be gallant and mature. Making dumb jokes and bragging, more or less, about exploits. Thomas had mainly sipped his beer and looked on from a distance. He'd always been shy around girls. Especially Josie, even though she did talk to him when he mustered up the courage to say something. Like the time he told her he was pretty good at pool. Which was pretty lame. Everybody knew that girls think pool is boring.

But if you're good at something, you keep going back to it. Thomas was killing time at the pool hall when he heard about Josie's foot. Broken or something. Josie was in the hospital in Sioux Falls. And this news gave Thomas a great idea. He could visit her in the hospital and show he really liked her. Better yet, he could visit her in the hospital and bring her flowers. The perfect move.

True, he'd never actually driven in Sioux Falls. But that couldn't be too much different than driving in Flandreau. Just more people. Thomas had gotten his license when he was 16. He'd practiced a lot and passed the written and driving test the first time. And he'd never had an accident, although he did almost hit a deer in March. He'd been reconnoitering on gravel roads. Well, more exactly, he'd been driving around the section where Josie's family lived. He hadn't caught sight of anyone. But he did see three cows. Once he'd overheard Josie laughing with a group of girls about her trusty cow Tag Along. She claimed that she and her sisters used to ride bareback on Tag Along when they were young. That would have been something to see.

Thomas wasn't great with maps, but Mrs. Jenkins in the library was happy to help. She probably thought it was a good sign that he was finally visiting the library. She seemed amused by his intent to "visit someone in the hospital". Fortunately she did not pry. Even when Thomas told her that he also needed to find a flower store. She produced a Sioux Falls phone book and showed him how the yellow pages worked. She pointed out that a florist had a shop on Minnesota Avenue, not far from the hospital.

Thomas was pretty good at procrastination, but this time decided to act quickly. He didn't want to get to the hospital and find Josie had already been discharged. So he put on a clean shirt and combed his hair. He shot the breeze with Hank at the gas station as he filled up his 58' Ford, bragging that he had business today in Sioux Falls.

The drive south on Highway 115 was pretty straightforward. He passed the welding shop at the edge of town where he'd once brought the Ford to have the rear fender repaired. The highway became Cliff Avenue at the city limits, so Thomas joined a line of cars headed somewhere. He'd always found the difference between streets and avenues confusing, but Mrs. Jenkins had shown him about where the florist should be. After turns and more turns, he spotted the sign for Jan's Floral. Fortunately Jan had an adjoining parking lot, so no parallel parking was required. Thomas had vowed after his driving exam to never risk such a tricky maneuver again.

Thomas felt important as he passed through the front door. He was on a mission that required guts and determination. One customer was already at the counter. Thomas stood behind and paid attention to the type of banter that was expected at a flower shop. Quite a bit, it seemed. The fellow ahead of him kept going around and around about his purchase. He couldn't decide whether to get cut flowers or a potted plant. He must have a lot of money. The fellow didn't specifically ask the price of the flowers he was considering. He seemed pretty sure of himself. And he didn't seem concerned that someone was standing behind him, waiting. Maybe he didn't notice. After much debate, the customer finally concluded his purchase. He then brushed past Thomas as if on a mission of great importance. He looked younger than Tom expected and vaguely familiar. Maybe he was still in high school or whatever.

Thomas concluded his business with the clerk rapidly. He explained, with some embarrassment, that he only had five dollars to spend. A small potted plant seemed just right.

And so, balancing the plant somewhat precariously on the passenger seat, Thomas turned north on Minnesota Avenue and headed to 18th street and the hospital. As he approached the stop lights, he worried a bit about the amount of traffic going both ways. He signaled his left turn and waited patiently as car after car drove past. No break in the line occurred until the light turned yellow and then red. Well maybe next time or the next. After he had waited through three light changes, he was beginning to feel more anxious. When the light turned red again, he heard a tapping on the window of the driver's door. When he awkwardly rolled down the window, the old fellow laughed and said "You're not from Sioux Falls are you?" He went on to explain that proper driving etiquette required someone waiting for a left turn to execute it quickly when the light turned yellow. "Good luck", he said merrily. "You might need it."

When Thomas finally made the turn, he was sweatier than he'd like to be when visiting a girl. But that thought quickly passed as he spotted the hospital ahead. Fortunately there was a big parking lot and plenty of empty spaces. As he emerged from the car, Thomas set the plant on the roof long enough to tuck in his shirt and make sure that he pants zipper was all the way up. He had to admit he was nervous. He didn't like hospitals. Well, truth be told, he'd never actually visited anyone in the hospital. It seemed like a pretty serious undertaking.

Tom finally found his way to room 229 and discovered the door was half-closed. Hospitals, he realized, have a distinct odor and solemnity. He knocked gently on the door and Josie's familiar voice bid him to enter. He took several hesitant steps and then froze when he saw another visitor present. "Do you know Ben?" she cheerfully asked. No, not exactly he thought as he recognized the boy who had stood in front of him at the flower store. And sure enough, a large bouquet of cut flowers sprung from a vase on Josie's bedside table.

* * * * * * * * *

"And that was that", says Thomas as he sits back in his chair and sips coffee. "The hospital stay must have made a big impression on Josie since she became a nurse." As far as Thomas is concerned, his reminiscences are concluded. He claims not to recall what the two boys said to each other, but he thinks Josie did most of the talking. She placed his potted plant in the shadow of the large bouquet. Thomas isn't sure which boy shuffled out of the room first. He does know that it took him another three months to summon the courage to finally ask Josie on a date. And he's quite certain neither he nor Josie bothered to recall Ben over the fifty-two years of their marriage, until now. On prior occasions when playing pool, Thomas rarely succeeded in achieving extreme spin and misdirection to hit a target. But he pulled that off once while courting. "Sometimes" Thomas muses, "you're just lucky. And make all the right moves."

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Author's Note: This short story is a work of fiction. Or, in the words of songwriter Jimmey Buffett, "It's a semi-true story believe it or not, I made up a few things and there's some I forgot, but the life and telling are both real to me . . ."

The Art in Medicine

Lauren Schild, MS IV; and Judith Peterson, MD

Though the practice of medicine is frequently referred to as an art, art itself is seldom used or discussed in medical education.[1] Artwork can and has been used to teach various skills and principles including observation, discussion, analysis, and abstract thinking. In addition, the creation of artwork can improve fine motor skills, problem solving, and emotional processing. It is expected that students will improve or develop these skills—which are central to the practice of medicine—on their own as the demands on students' time increase.

Observation is critical to the practice of medicine as it can change a diagnosis or care plan.[2] Observation is not simply looking at an image or object, it is taking time to see the details within and drawing connections between what is seen. We could look at a patient sitting in the waiting room but may fail to observe the nervous fidgeting of their hands, the wince of pain as they stand up, or the state of their clothes. Some patients hesitate to bring up concerns, perhaps because they feel ashamed or don't want to be a burden, but a simple observation can help them feel seen and improve their openness with us. Those observations do not necessarily even need to be clinically relevant to draw benefits, such as noticing that a long-time patient has changed their hair style or a new patient is wearing their favorite team jersey. Observations can help make a patient feel like a person rather than another case.

The analysis of artworks and other visual cues necessitates not only a visual analysis of the observations made but also a reflection of the possible meanings behind those observations and what influences our own responses to those observations.[3] For example, someone might see a painted cardinal and feel sad, and a reflection on why reveals that this person heard a cardinal singing during a bleak time. Another person may see that same cardinal with a positive interpretation, fondly remembering time spent birdwatching with a loved one. Our life experiences help guide our interpretation of visual stimuli, and those interpretations can unconsciously drive our decision making if we do not take the time to dive into the "why" behind why we react in certain ways to different stimuli. One example in medicine is an anchoring bias where one piece of information captures our attention because we are reminded of another case or something learned in school, and that observation distracts us from other possibilities. Analysis and reflection of our interpretations become even more important in situations of ambiguity; taking the time to think about our interpretations increases our awareness of potential biases and can decrease our discomfort with ambiguity.[4]

The creation of art ranges from broad, abstract paintings to realistic sculptures to visual illusions and everything in between, and even the most simple-appearing works can require time, planning, and skill to execute. Time and planning come into play when deciding on what to create, what medium to create with, when and where to do it, why are you doing it, and what is the message you want to convey. Similarly, many of those same decisions come into play in medicine when deciding how to go about diagnosing or treating a condition, when to complete a next appointment or procedure, and defining our reasoning that led us to those decisions. Each new medium an artist decides to work with has a learning curve and relies on past experiences to shape how that new knowledge might be used, similar to our experiences working with new patient populations. Many forms of art also require dexterity and hand-eye coordination to satisfy the goals of the artist creating a work, skills which are useful in the medical field from relatively simple in-office procedures to complex surgeries.

In addition, art has long been used as a means of expressing emotions ranging from rage to apathy to jubilation and is often influenced by the views and experiences of the artist who created the work. The process of creating these works allows the artist an opportunity to contemplate the subject matter and express their feelings without necessarily having to find the words to write or speak those feelings. The process of creating art—rather than just the final product itself—can be therapeutic in allowing the artist to enter a different mental space and work through strong emotions. For medical students and other medical personnel, creating artworks can help to process difficult days, and shifting our focus outside of medicine can greatly reduce the risk of burnout.[5] Medical

students face a plethora of new experiences and challenges that can weigh on them, and though they are encouraged to talk to others, taking that first step to reach out can be difficult. Artwork can help medical students and others get to the point that they are ready to talk or even provide the basis for starting a discussion about difficult experiences.

With these premises in mind, an Arts and Humanities course was designed for students at the University of South Dakota's Sanford School of Medicine. The project was supported by the Scholarship Pathways Program and consisted of eight two-hour sessions during which students began class with an observation, analysis, and discussion exercise led by the course instructor. Instructors rotated with each session, ranging from art professors to community artists to physician artists and medical students in order to expose the students to various points of view and art mediums. The second portion of each session consisted of the instructor giving a basic lesson in a different art medium each week and allowing the students to try that medium themselves. Students created their own works using charcoal, watercolor, embroidery, cyanotype printing, and more. In working with each new medium, students typically chose their subject matter individually, and the supplies used for each medium were available to them throughout the course and afterward so they could experiment and create at will. Feedback from students included:

"The guest teachers we had for sewing were very knowledgeable and kept linking art and critical thinking back to medicine which was very helpful."

"[The instructor] is great and had a fun concept to paint about and search ourselves."

"Had a lot of fun with the instructor today! He was great and I could tell that he was very passionate."

"Very fun to do a different type of art. Never done it before."

Currently the course is in the second year of implementation and offered as an extracurricular activity that students can sign up for, with the hope of adding it as an elective for credit in the future.

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Dear Reader: I Love You

Noah Bensen, MS IV

Yes, you.

My close friends hear this three-word phrase from me all the time. I can avoid the raised eyebrows if I couch it in a certain amount of facetiousness, but, as with many jokes, there is a hint of truth behind it. More than a hint in this case. I do love them, and I want them to know it. And now I want you to know it as well.

I was lucky to grow up in a family that exchanged these words often. We still, siblings and parents, end almost all our interactions with these words. Perhaps you were also lucky in this way. Or perhaps not. My dad's parents didn't show a lot of emotions around him when he was growing up; he didn't often get hugs or told that he was loved, and he informed me many times that he didn't want that for me or my siblings. Similarly, I don't want that for my friends. Or anyone else, really. It continues to surprise and sadden me just how many people I know who receive so little support or so few words of affection. To combat this, and just so you hear this at least once today: I love you.

These three short words convey such great meaning that many of us hardly ever use them. They're daunting; their use carries some inherent vulnerability and conveys a certain amount of devotion. Perhaps we don't use them because we fear rejection or apathy. Perhaps we fear making others uncomfortable due to the words' implied intimacy. But in acceptable contexts, shouldn't we say them more often despite these risks? Aren't these words so profoundly powerful and positive that it would be a shame not to offer them more freely and regularly? Don't the people in our lives deserve to know if we care deeply for them?

I was recently on vacation with my family and some of my parents' friends. On the first night, shortly after we'd all been introduced to each other, we were all in one hotel elevator getting off at our respective floors for the evening. As the doors opened for my dad's work friend, there were many overlapping "good night"s, "sleep well"s, and "see you tomorrow"s as the friend walked off the elevator and down the hall. As the doors began to close, I said "love you!" down the hall, again couched in that unassuming facetiousness. Giggles ensued, but to my surprise, after a pause, I heard a "love you too!" from down the hall right before the doors shut. To quote today's youths: he passed the vibe check – and the humanity check.

To the point of the title, I want you, reader, to understand that somewhere out there is a med student who cares very much about you and wishes you profound peace in a life that can be fraught with hardships. Medicine is an arduous and sometimes isolating field; the demands placed on our time and attention can easily supersede other responsibilities and relationships. When you couple this with the rest of life's personal tribulations, it's really no wonder so many medical professionals feel so alone, depressed, or burnt out. But medicine loves a remedy, and, to me, the most effective remedy for these hardships is the support and closeness we might receive from others. To that same end, the best remedy we can offer others is the support and closeness we give to them; and that may just come in the form of three short words.

What I propose is this: tell your friends. Tell your family. Tell that guy getting off the elevator. They may be surprised to hear it, but I can all but guarantee that they'll be happier to know you care.

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Jamais Vu

Sara Alhasnawi, MS II

Sandy walls stand in a silent land,
where paths once carried the weight of a tribe once proud.
The cradle of civilization, of healing hands,
a land built for peace—
but never given a peaceful day.

In this land, a hospital stood tall.
Its healers reaching toward the light,
their vow betrayed,
their promise dimmed by lies.
Time spares no one,
not even the truth.

Children laugh,
yet their voices fall like foreign syllables,
a language my tongue once knew,
now tasting metallic, estranged.

Walls wear bullet-pocked tattoos,
though my memory swears they were murals of doves.
Was that my alley?
Or someone else's childhood pressed into my skin?

I dream in black and white:
the graves of my loved ones,
their cries deep as earth,
as I recall the history of wounds
and the fragile halos of good
woven through its lies.

Here humanity lies—
souls devalued, yet unbroken.
Their worth returns like breath,
the cries of healers and fighters unforgotten.
Exile cannot sever native roots,
and the oath to heal will not release
Hands complicit, hands strayed awry.

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A Visual Art Immersion Experience for Medical Students

Hannah Sutton, MS IV; Christina Lusk, MS IV; Mark Petereit, MS IV; and Matthew Simmons, MD, FAAN

Abstract

The executive summary from the 2020 Association of American Medical Colleges (AAMC) report on *The Fundamental Role of the Arts and Humanities in Medical Education* states that "The integration of the arts and humanities into medicine and medical education may be essential to educating a physician workforce that can effectively contribute to optimal health care outcomes for patients and communities." This perspective has contributed to the widespread implementation of medical humanities experiences into medical school educational programs. Humanities programs in visual art, literature, history, and other disciplines have been developed for medical education. In this report, we describe a visual art immersion experience for medical students conducted at a single campus of a community based medical school and review key aspects relevant to medical education.

Introduction

The 1910 Flexner report transformed medical schools in the United States and Canada by establishing a scientific basis for medical education. The report's author, the educator Abraham Flexner, also emphasized the importance of humanities training for physicians and assumed that this would take place prior to students commencing medical school. During the next 100 years, there were rapid and exponential advances in the science of medicine. In contrast, the development of ethics, humanities, and professionalism in medical education evolved gradually.[1-3]

With the onset of the 21st century, nearly 100 years after the Flexner Report, there was a surge of interest and scholarly work addressing the application of humanities in medical education. This work provided evidence to support medical humanities training for medical students and residents.[1,4,5]

Medical humanities encompass major areas of focus such as history, literature, visual arts, and ethics which bring unique perspectives to medical education. Visual arts can specifically be used to teach observation skills, build tolerance for ambiguity/uncertainty, nurture empathy/compassion, and support a culture of wellness.[6-8]

Immersion Event

Twelve clerkship level medical students were hosted by a local arts center for a two-hour immersion experience. Content was delivered by an art educator in collaboration with a medical school faculty member. The format included the following components: 1. Slide show and narrative overview of visual art as applied to clinical training by highlighting themes of observation, uncertainty, ambiguity, empathy, kindness, and compassion. 2. Demonstration of Visual Thinking Strategies (VTS). 3. Unstructured time to explore the art galleries as a wellness activity. 4. Introduction to the arts center as a community resource.

1. Overview of the clinical applications of visual art in medical education: Students viewed a slide show of art images accompanied by a narrative commentary. It was emphasized that despite enormous progress in the use of diagnostic studies in medical practice, observation and inspection of patients remains important or essential for many medical disciplines. The study of visual art can provide training in methods of observation. [6,9]

Even with the aid of advanced technology, it was highlighted that medical students and practitioners continue to experience frequent instances of diagnostic uncertainty or ambiguity which is stressful. Exploration of visual art provides an opportunity to build tolerance to ambiguity and uncertainty, skills necessary for peacefully navigating medical practice. It has been observed that tolerance of ambiguity is significantly linked to lower stress levels and improved adaptability. It has been found that medical students with a higher tolerance for ambiguity tend to experience better psycho-social well-being and increased empathy.[10-12]

The slide show emphasized that art could show how illness affects people, including expressions of suffering. Visual art, like other humanities experiences, reveals the perspectives of other people which promotes empathy formation. The cultivation of empathy in turn supports acts of compassion

and kindness which are foundational to the humane and ethical care of patients.[6] Studies have also shown that higher levels of empathy and compassion will likely reduce burnout, stress, and depression among physicians.[13]

2. Visual Thinking Strategies (VTS): Visual Thinking Strategies (VTS)[14,15] is a teaching method that involves interpreting art and exploring the various conclusions that can be drawn from it by asking the following questions: What is going on in this picture? What do you see that makes you say that? What more can you find? The depth of the exploration can be enhanced by repeating the questions and expanding the dialogue among the learners. VTS addresses key dimensions of medical education including careful observation, communication, and consideration of multiple interpretations akin to creating a differential diagnosis. VTS can potentially build tolerance of ambiguity and increase empathy.[12] A student participant from this immersion event appreciated the value of tolerating ambiguity "as we work toward becoming comfortable with being uncomfortable."

A VTS activity was completed for this immersion event. The VTS was accomplished by having the art education facilitator select a work of art on display in the gallery. The title of the work was covered, and the students were asked to describe what was "going on" in the image. After each student communicated their conclusions to the group, the students were asked to provide supportive reasoning for their conclusions. The students were then asked to re-examine the piece to see "what more they could find." After the students revealed their additional findings, the facilitator revealed the title and provided feedback to the student participants.

In describing the VTS activity, one of the student participants reported: "I was impressed with the various points of view the class shared and how each person could find a new aspect of the painting to contribute more to the whole interpretation. Using the VTS method encouraged us to continue asking questions and to look deeper at what is right in front of us. By asking, "what more?" we were able to expand beyond the immediate conclusion we drew during our first impressions. Like art, patients are unique individuals who do not always follow the status quo. Sometimes the missing piece of a puzzle is right in front of our faces, but we need a different method of interpretation to bring new perspectives to the situation." It has been described that VTS can be used to "foster wonder" to support humanized patient care, scientific discoveries, and lifelong learning.[16] Overall, VTS can be seen as transformative learning and a means of developing clinical excellence in students and practitioners.[14-16]

3. Art gallery exploration: During this immersion activity, the students were encouraged to relax, take a break from clinical training and explore the art images on display in the galleries at the art center. The role of arts and humanities experiences in support of physician wellness is increasingly recognized. Visual art experiences can address burnout among healthcare professionals and students. Visual art may be therapeutic through creating or simply observing art. These activities encourage mindfulness, allowing individuals to step away from the demands of caregiving and healthcare to focus on the present moment, leaving students feeling "invigorated" and "refreshed." Art provides an outlet for processing emotions such as frustration, grief, or compassion fatigue in ways that may otherwise be difficult to articulate.[17]

Visual art also plays a vital role in fostering professional identity and a sense of purpose in medicine. Incorporating arts related activities into medical training encourages students to deeply reflect on their roles as future healthcare providers. By engaging the "big questions," using art and humanities experiences, students reported a stronger connection to their clinical work and a renewed sense of personal growth. These experiences give learners an opportunity to process the vulnerabilities they encounter, such as dealing with patient suffering and ethical challenges. Integrating art into medical education can add balance to clinical training and fulfillment in the work of patient care, which can support wellness of trainees.[18] A student participant stated, "It was refreshing to use a visual arts immersion experience as a means to explore clinical thought processes in a relaxed and nonjudgmental environment."

4. Arts center as a community resource: Arts centers and museums are a common fixture in urban centers where they are a source of creative expression, education, entertainment, and cultural development. For medical students, arts centers are a means of interacting with the community where they are training and gaining relevant cultural competence. Outside an arts center, street art and murals provide another cultural immersion experience. During this immersion activity, the students were informed about local art courses and opportunities for enrichment in the arts available to them.

Arts centers are also an excellent environment for medical humanities education and can provide a source of wellness for medical professionals. Sources of artwork can also be found in diverse settings in smaller rural communities or are available virtually for use in medical humanities education. [15] As a result, activities such as Visual Thinking Strategies are potentially readily accessible for all medical trainees.

Discussion and future directions: This visual art immersion activity provides an example of how a visual art humanities immersion experience can be feasibly integrated into an existing medical education curriculum at the clerkship level comparable to programs conducted at other medical schools.[19] Key educational themes were addressed while also providing a wellness activity and community engagement.

Future programs may be improved by using formally trained VTS facilitators and repeated VTS sessions including interprofessional trainees. Visual art programs to support continuing medical education and wellness for medical school faculty could be trialed. Opportunities for expanded wellness activities can be explored. It would be interesting to use visual art to demonstrate Type 1 verses Type 2 thinking. It will be important to analyze outcomes of any new endeavors to provide evidence of effectiveness in medical education. It will also be desirable to develop sustainable partnerships with community-based art centers, museums, and humanities-based organizations who can support medical education and medical student wellness into the future.

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Med Writers: Where Medicine Meets the Humanities

Linze M. Christensen, MS III

The *Med Writers* program at Sanford School of Medicine provides a structured opportunity for medical students to reflect on the emotional and intellectual challenges of clinical practice through writing and the arts. Reflection has been shown to strengthen professional identity formation, enhance resilience, and deepen empathy, all of which are essential skills for physicians practicing in rural and underserved areas. Through poetry, essays, and art, students transform lived experiences into creative expression and can honor the joys and burdens of caring for others, finding healing in the act of storytelling. It calls on us to reflect on and honor the roles we serve outside of medicine as spouses, parents, siblings, children, and friends. *Med Writers* highlights the role of the humanities in medical education and offers a pathway for sustaining wellness and meaning in the practice of medicine.

One of the most contemplative aspects of medicine is that it brings you toe-to-toe with death, encountering it without ever experiencing it. In these moments, we begin to recognize how much of medicine lies beyond our control, despite the knowledge and skill we may carry. Spirituality, whether rooted in faith, personal conviction, or quiet reflection, often rises to meet this space of uncertainty, guiding both patients and providers through what cannot be explained or healed by science alone. This piece is my attempt to hold one such moment, to give words to the silence it left behind.

<u>It was the first time I...</u>
watched a mother die.

I guess I'd never considered the grandmothers,
the old ladies in our halls,
to be someone's mother,
to be someone's world.

Her children were so young,
none older than eight,
yet they had lived more hours within hospital walls
than I had lived in years,
and would soon drink from a cup much bitterer than mine.

How can you taste motherhood
without enduring labor pains,
without shouldering another's fragile life?

I learned that day: watch one slip away.

Hear small footsteps fade down the hallway,
while death draws nearer.
See her husband at the bedside,
his cries rising like prayers to God
for the soulmate torn from him too soon.
Watch her parents stare blankly
at the still body,
the unmoving face of their little girl.

Then you'll understand the vapor of life.

Medicine had no answer here.
As the silence pressed in, I knew
only an unseen hand might steady us.
Prayer had to take the place of cure.

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Medical Humanities in South Dakota: The Current State of an Interdisciplinary Field

Peter J. Hoesing, PhD; Ellie Schellinger, MA, HEC-C; and Lauren Schild, MS IV

From Prairie Doc® Media to the evolution of university offerings to new public investments in humanities research and education, the interdisciplinary field called medical humanities has roots at least thirty years deep in South Dakota.[1] This article summarizes developments spanning the most recent decade, inviting physicians and other health professionals into a big tent philosophical shift toward health humanities. That shift is not new in national and global discourses, and its roots in our own geography demonstrate how this inclusive approach aligns with contemporaneous thinking about interdisciplinary, interprofessional clinical care. Across this dynamic landscape, we invite readers to move beyond the question "how shall we define medical humanities" toward a deeper engagement with how the methods and tools of health humanities can improve patient care. Ideally, this discourse should move us beyond the important technical elements of attending to mere bodies toward inspiring kindness and care for complex humans and communities.

Recent History: Refusing to Waste a Crisis

An old saw often attributed to Winston Churchill about finding opportunity in crisis was apt to describe a situation in which the University of South Dakota Sanford School of Medicine (SSOM) found itself at the height of the most devastating global pandemic in recent human memory. When hospital, clinical, and public health safety protocols responsive to the necessities of infectious disease control for SARS-COVID-19 forced medical students out of clinical spaces, depriving them of essential learning experiences, the SSOM administration led a pivot toward online offerings more frequent and various than at any other point in the history of the school. SSOM had two formal offerings in medical humanities at the time: a long-standing survey course called Medicine and Humanities and a specialized look at Spirituality in Medicine. A Medicine and Law course was still under development. Faculty developed offerings both new and adapted from prior synchronous courses and ran them that spring, summer, and fall.

When those remaining at SSOM caught our collective breath—having already seen so many patients permanently lose theirs—physicians, other health workers, and faculty of all stripes awoke with the rest of the world to the sheer depth of our need for human connection. Humanity had already lost so many at that point, and those losses hit the hardest as they tore through communities' capacity to form and maintain local social bonds. The continuing social rupture underscored the importance of both those highly localized social bonding mechanisms and broader notions of the Commons. To that point, the post-modern reality of what it meant to understand ourselves and our cultural situatedness in a multicultural world replete with overlapping social commitments and timelines was already quite complex. The pandemic shattering of communities reminded us not only how fragile we are, but also how deeply important social connection is to our overall wellbeing and how much work it requires to rebuild and maintain.

In the context of pandemic cataclysm, SSOM students taking these newly revised online courses brought with them new clinical experiences, crises, commitments, and insights. They completed coursework unlike their predecessors while pushing through new challenges. They expressed a hunger for analyzing and processing the ethical, philosophical, and legal content of those experiences, and that drive continues to inform a proliferation of curricular, co-curricular, and publicly accessible humanities offerings.

Through late 2020, the deans, department chairs, and the Medical Education committee worked to implement a strategy of rapid curricular development. For the Ethics and Humanities Faculty Section, this meant several concurrent interventions:

- SSOM installed a Director of Medical Humanities (Pete Hoesing, PhD) to pursue an expansion of humanities content that would remain inclusive of visual arts, which had been a strong suit of existing curricular and public programming.
- SSOM supported Hoesing's case for support from the South Dakota Humanities Council (SDHC). The Council

funded a statewide medical humanities asset mapping and needs assessment project during the summer 2021.

- The Ethics and Humanities Section began an aggressive bibliographic effort to ensure medical student and faculty access to the best emerging humanities content from the pandemic.
- The SSOM Medical Education committee supported the continuing development of the Medicine and Law course, which then launched in spring 2023 under the guidance of an attorney Jane Clare Joyner, JD, MSN, RN and long-serving SSOM Ethics faculty member Ann Cook, PhD. The two-week course considers the intersection of legal and ethical issues that can accompany medical decision making and the delivery of health care.
- All these efforts aligned with national and international trends incorporating arts and humanities into medical education, particularly the Association of American Medical Colleges' December 2020 publication of a monograph articulating *The Fundamental Role of the Arts and Humanities in Medical Education*.

Meanwhile, several developments adjacent to the SSOM humanities also piqued interest among faculty and students alike. Colleagues across USD's College of Arts & Sciences, College of Fine Arts, Wegner Health Sciences Library, undergraduate Honors Program, and Augustana University were likewise developing noteworthy humanities programming, and SSOM began to support linkage across domains and disciplines.

- The College of Arts & Sciences put SSOM faculty in touch with faculty interested in health humanities, some of whom were already publishing related content.
- The College of Fine Arts supported Hoesing's work with the SD Humanities Council through a small group of faculty led by visual artist Ariadne Albright, MFA, who had developed an Arts in Health certificate program open to undergraduates and graduate health sciences students. That program has now also spawned an undergraduate Arts in Health Minor.
- Wegner Health Sciences Library had hired historian Anna Simonson, PhD, MLIS, who designed an undergraduate honors course in Graphic Medicine, a field that uses cartoons and graphic novels to illuminate health and medicine topics from a variety of physician, patient, public health, and other perspectives.[2]
- Simonson also worked with USD's Chair of Communications Studies, Leah Seurer, PhD, to develop a new co-curricular offering for medical residents: they launched a book club exploring graphic medicine titles.
- Augustana University finalized their Medical Humanities & Society Minor, incorporating courses and perspectives from biology, anthropology, sociology, religion & philosophy, and the arts.

From the earliest days of this collaborative statewide effort, Ethics and Humanities faculty worked with these changemakers to build new programming. Former Director of Sanford Health's DeGroot Center for Bioethics, Humanities, and the Healing Arts Ellie Schellinger, MA, HEC-C worked with Hoesing on the SDHC-funded asset mapping/needs assessment project. The pair then teamed up with Dr. Simonson in Wegner on a new series called "Speaking of Health" featuring authors of recent titles in health humanities. That team has since attracted several rounds of SDHC funding to support the series.

As all this development continued apace, the SSOM Medical Education committee expressed an appetite for continuing experimentation in which the Ethics and Humanities faculty were well-positioned to engage. Based on a consistent finding from faculty physician voices in the needs assessment that urged medical students to inscribe their clinical experiences and reflections through as much writing as possible, Schellinger and Hoesing revived a co-curricular writing series known as Med Writers. These gatherings invite medical students to utilize a variety of writing prompts and techniques as they work through the staggering volume of emotional, ethical, and logical challenges and opportunities that arise through their clinical encounters with patients, peers, care teams, and supervising physicians. Again and again during the needs assessment, physicians emphasized the importance of this kind of reflection as both a creative outlet and a pathway toward professional identity formation.

A second experiment tied strong existing interests in visual arts into a new course offering. Through the Scholarship Pathways Program, medical student Lauren Schild developed a course for Pillar 1 students called Visual Arts and Humanities. In it, students have opportunities to enhance their observation and communication skills through the study and discussion of selected artworks as well as explore creative outlets for emotional processing via various artistic materials and methods. The course exposes students to a variety of perspectives from both classmates and guest artists

to foster an understanding of how visual cues can take on different and sometimes competing meanings. Student participation in the course grew from nine students during the first year to 20 in the second year, and plans for future curriculum development are in progress.

Another development in the visual arts realm brought together some SSOM, Wegner Library, and community resources that had already worked together on a range of prior projects. The Visual Arts Steering Committee took charge of a curatorial project to ensure good stewardship of some new gifts to the USD permanent collection from an anonymous donor to the SSOM. These inspired a total curatorial re-design of the Health Sciences Center on 22nd street in Sioux Falls. Curated during the 2022-2023 academic year with support from Ethics and Humanities Faculty member and visual artist Sheila Agee, the building now features six works from the donor, a few works on loan from Neurosciences Chair Dr. Jerome Freeman, and the revitalization of several previously underutilized spaces throughout the building. The committee has since worked with an inaugural artist-in-residence on a new installation in Wegner Health Sciences Library: the immersive installation opened to warm reception from about 70 attendees and a panel discussion involving the artist, Amy Fill, MFA. Live music and audience participation made the event even more engaging. A call for the next artist-in-residence opened during summer 2025, and the Visual Arts Steering Committee will soon launch that residency.

A fourth impulse emerged from the SSOM's Yankton campus, where Campus Dean Dr. April Willman—having never met a student in her informal polling who lacked some kind of musical background—recruited Dr. Hoesing and an enterprising group of medical students to form a Music in Medicine student interest group. That group has since performed at a number of SSOM and community functions in both Yankton and Sioux Falls. [3] They meet regularly for both the business of the group and to make music together.

As these devoted faculty and students have planned and collaborated, we have also looked across the University and the community to connect previously disparate, yet well-aligned assets and resources. Dean of USD's College of Fine Arts Bruce Kelley, PhD brought several of us together through strategic planning activities. Drs. Hoesing and Freeman prepared a summary of arts and humanities offerings for the 7th District meeting of the South Dakota State Medical Association. The Ethics and Humanities faculty have begun work in earnest with USD Foundation staff to plan for the sustainable future of medical humanities at SSOM. We have begun connecting this work to the longstanding work of the American Society for Bioethics and Humanities, the Health Humanities Consortium, and the American Association of Medical Colleges initiative on the Fundamental Role of the Arts & Humanities in Medical Education (FRAHME). [4]

In all we do, this cadre of artists, humanists, and physicians looks to bring out the best in our medical students and healthcare teams, inspiring all to care for multi-dimensional humans rather than being reduced to technicians for mere human bodies. It is precisely their understandings of human sociocultural and historical complexities layered over physiological and psychological factors that empowers kind, sophisticated, fully compassionate approaches to caring for fellow humans.

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Healing Notes: Medical Students' Encounters with Music in Medicine

Matthew J. Schmitz, MS III; Noah Bensen, MS IV; Mollie Cody, MS IV; and Katelyn Kenzy, MS IV

The following anecdotes were compiled by student members of the Music in Medicine Interest Group at the Sanford School of Medicine. This group, entering into its second year of existence, is composed of medical students and physicians who share a passion for music performance, music appreciation, and integration of the arts and humanities into medicine.

Through sharing their individual experiences of how music has impacted their interactions with patients, they hope to highlight the unique way in which music can help others connect, communicate, and heal.

Knock knock, we entered the patient's room. My family medicine attending greeted the patient seated in the chair, offering a warm smile and an open hand while introducing me as her second-year medical student. It was my first week of clinicals, and our next patient was a middle-aged female scheduled for an annual wellness exam. The patient offered a weak smile and a hesitant gaze as she shook my hand. I could sense weariness in her; the kind that takes years to accumulate. As the visit progressed, she revealed a few of the contributors: a history of divorce, recent relocation, and dwindling resources. My attending navigated the matrix of medicine amid the heavy cares of the patient, showing compassion and empathy without missing a preventative measure or relevant risk factor.

During the exam, my attending inquired about the patient's hobbies, to which the patient described her joy of playing guitar. I was unable to control the grin that burst across my face, and I excitedly told the patient that I too was a guitar enthusiast. The atmosphere of the room shifted like fog blown away by a clear breeze. When she looked at me, there was a light in her eyes; it grew as we talked about types of guitars and their respective sounds, regional stores with the best selection, Taylor vs Martin, and the value of acoustic electrics. I relayed how I was in the market for a new 6-string, and she offered advice for purchase options – a new brand to consider. I then expressed my desire to learn the bass. Her demeanor changed to one of contemplation. She went silent for a moment, appearing to gather her thoughts and said, "There is nothing that can compare to that bassline laid down by the bassist. It is the foundation of music."

Out of the corner of my eye, I saw my attending observing our discussion with a fascinated expression. A simple wellness visit had transformed into a new language. After the exam had concluded and the patient departed, my attending turned to me and said, "That was amazing to hear." I beamed inwardly with a warmth that can only be experienced with the combination of music and medicine.

– Matthew Schmitz, MS III

It was the last day of my cultural immersion week experience at LifeScape, a program in Sioux Falls that supports adults and children with physical and developmental disabilities. The previous day was packed with classroom activities at the specialty school so I was eagerly awaiting our final morning session: music therapy. These large group sessions led by the LifeScape music therapist combined tactile and auditory senses to be inclusive to all students regardless of their physical capabilities. We passed around ocean drums, played tambourines, and sang songs about popcorn while working together to "pop" plastic balls

off a large parachute. Shouts of joy and giggles filled the room as students and volunteers alike became fully immersed in the music.

As our third and final class of students filed in, I was paired with a first-grade, non-verbal student who was just beginning to learn how to use a digital communication device. The device would track her eye movements on the screen allowing her to select from various words and phrases which the iPad then voiced. Over and over again, she chose the phrase "happy birthday". Confused, the teachers confirmed that there weren't any birthdays in the class today but she continued to select this phrase. As we neared the end of the session, the therapist decided "Happy Birthday" would be our closing song for the day. As the melody began, squeals of excitement erupted from the student as she clapped and danced along to the song. Not only did she seem overjoyed to be understood with her new device, but she seemed to be energized by the song as well. As we waved goodbye, I left the class with an even greater appreciation for how music can serve as a common thread and form of communication even in an incredibly diverse group of individuals.

– Mollie Cody, MS IV

I recently found myself smiling as I caught a glimpse of The Lawrence Welk Show on a nursing home resident's TV. Lawrence Welk was an accordionist, band leader, and TV personality whose musical success started largely on the WNAX radio program in Yankton, South Dakota. My neighbor Laura introduced me to him, and we watched re-runs of his show every Sunday for many years. We would dance around the kitchen making dinner as she told me about the historical and personal significance the songs he played had in her life and to the people she loved. She has been gone for five years now, but those memories of watching The Lawrence Welk Show with her, along with the big-band piano renditions I would play for her, the records we listened to, and the musical performances we attended together, persist indefinitely.

"Where words fail, music speaks". It is sometimes hard to communicate the meaning a true sense of community has to us, the importance of the closeness the ones we love brings, the depth of ache and joy the memories of those we have lost holds. This is where music's invaluableness can be found. My recent visit to this nursing home resident's room was not social, but our appreciation of The Lawrence Welk Show and its ability to remind us of those we loved and to help us share that with each other, was as healing for us both as addressing their medical condition that initially brought me to them was. I have played piano and sung for many nursing home residents, and music's power to bring back memories and connect them and myself closer to those we know or have known, is always evident. Music will always be a great gift, and I am happy to be a part of bringing more music to medicine at the USD SSOM.

– Katelyn Kenzy, MS IV

I think my first exposure to the ubiquity of music in a patient setting was about two weeks into my clinical year. My attending physician and I had a very anxious patient who came in to have her Nexplanon replaced. She was clearly nervous about the procedure, and couldn't help but weep and tremble even during site sterilization. We did our best to distract her with questions about her hobbies and other interests as the procedure began, but paused several times for consolation as her repeated glances toward the excision site each sent her into a short fit. Further probing prompted her disclosure of her love for music. She calmed quickly as she told us how she was a musician herself, and had recently started listening to a new jazz band that she pulled up on her phone for us to listen to with her while the doc worked to remove the implant. We discussed favorite genres, bands, and gave each other recommendations on different pieces the other might like. There was no need for any further pauses for the rest of the procedure, which finished uneventfully.

Music is often called a language – it is written, read, and interpreted. The writings denote a specific sound, and those sounds hold meaning. However, unlike many verbal languages, music doesn't require any previous training in the language to be able to relate to it and appreciate it. Music is everywhere, and it would be virtually impossible to find even a single person who never listened to music and had absolutely no opinions on the matter. Rarely does someone ask "so, do you like music?" as an ice-breaker, but rather "what kind of music do you like?" We all implicitly understand how pervasive music is, and its omnipresence guarantees that we always have at least one thing in common with our patients.

– Noah Bensen, MS IV

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My Why: Hayley Eisenbraun and Her Fight for Her Vision

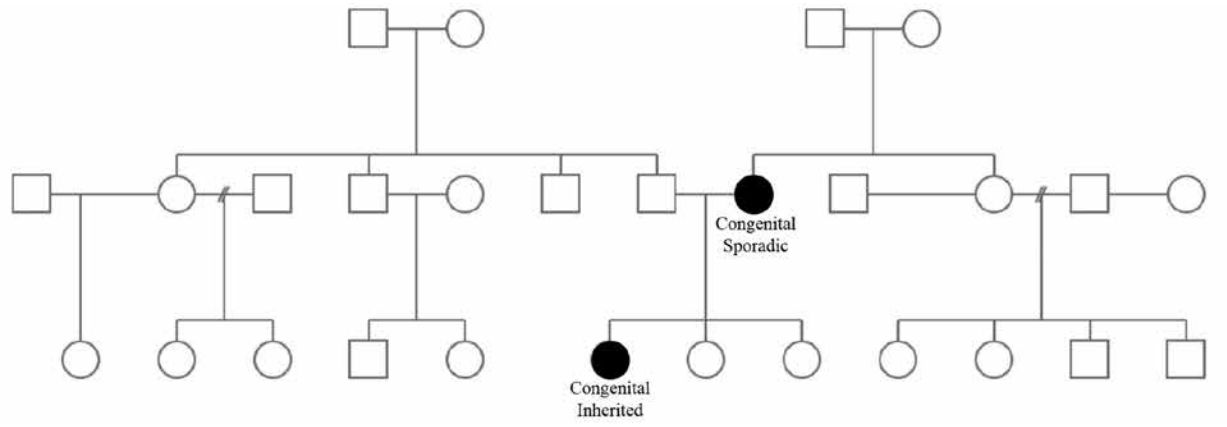
Emily Eisenbraun, MS III

My parents knew the risk of aniridia in each of their children was 50 percent. A 50 percent chance that with each pregnancy my mom carried she would pass on the autosomal dominant condition of Aniridia. Aniridia is a condition characterized by the complete or partial underdevelopment of the iris.[1,2] About 15 percent of aniridia cases are sporadic, while 85 percent of aniridia cases are inherited in the autosomal dominant pattern.[3] Our mother developed a sporadic mutation in utero leading to her ability to pass down the trait in an autosomal dominant fashion to any future offspring. She was born with the absence of an iris in her left eye and an underdeveloped brown iris in the right. I was born in 2000 with my dad's hazel eye color. My sister, Claire, was born in 2003 with the color of our mother's brown right iris. Little Hayley came into the world with big, beautiful black eyes – no irises at all: complete aniridia. After reassurance she did not have a genetic condition called WAGR including **W**ilms tumor, **A**niridia, **G**enitourinary abnormalities, **R**ange of developmental disabilities, Hayley lived the first 13 years of her life like any other kid.[4] That is, aside from her enormous collection of sunglasses. Without irises, Hayley experienced full pupil dilation regardless of the amount of light in her environment. When the time came to discuss her obtaining her driver's license, my family knew we had to take action to protect this form of Hayley's independence. We were worried her vision could deteriorate to a point in which it wasn't adequate to obtain a driver's license in the state of South Dakota.

Her exceptional doctors at the Wright Vision Center and Black Hills Eye Institute had managed her care to this point in her life. Aniridia is often associated with cataracts, glaucoma, nystagmus, and impaired visual acuity.[5] The time came to explore surgical options of cataract replacement and artificial iris implantation. The doctors in South Dakota were honest with us regarding their lack of experience with artificial iris implantation in children. Artificial iris implantation wasn't approved in adults and children by FDA until 2018.[6] They recommended an ophthalmologist at Wills Eye Institute in Philadelphia, Pennsylvania. My parents and Hayley traveled to meet with this physician and ultimately decided to proceed with the surgery. Prosthetic irises were hand painted in Germany for her based on the color and pattern of our father eyes. In March 2022, my family traveled to Philadelphia for cataract correction and placement of her customized prosthetic irises. Hayley underwent both surgeries, spaced two days apart, and none of us could have imagined how the following years would be a fight for her vision.

Before we were able to travel back to South Dakota from Philadelphia, Hayley developed surgery-induced glaucoma.

Figure 1. 3-generation pedigree of those with aniridia in the family.



Her eye pressure went as high as 64 mmHg. For reference, normal eye pressure is between 10 and 20 mmHg.[7] She also developed aniridic fibrosis syndrome, a condition resulting from intraocular surgery in individuals with aniridia leading to uncontrolled fibrosis.[8] Her fibrosis was treated with intermittent YAG laser capsulotomies. This laser procedure is used to control scar tissue formation following cataract surgery.[9] She was put on 7 different eye drops every 2 hours and high dose prednisone. She conquered the demanding medication schedule, "moon facies", and pain with poise – even though being a teenage girl is hard enough on its own. About a year later, in July of 2023, she woke and was only able to see darkness in her left eye. We rushed her to the doctor to find out she had developed breakthrough glaucoma with a left eye pressure of 55 mmHg. At this time, the Ahmed glaucoma valve was offered for her left eye and completed in Rapid City. A couple months later our family and her medical team made the preemptive decision to undergo Ahmed valve placement in her right eye. Several months after this, Hayley began having pressure problems again and it was determined the Ahmed valve in her left eye had failed. She completed a revision surgery successfully. Two weeks following this revision, she developed a hypopyon, or a collection of leukocytes in the anterior chamber of the eye.[10] She continued diligently following her eye drop medication schedule until March of 2024, when it was found her left eye's Ahmed valve had failed for the second time. With each revision, her ophthalmologist engineered the valve covering of cadaver cardiac tissue in a slightly different way. This final revision has held steady since!

Figure 2. Photograph of Hayley's eye in the days between the completion of cataract and artificial iris implantation of the right eye, awaiting surgery for the left. 2022 in Philadelphia. Published with permission.

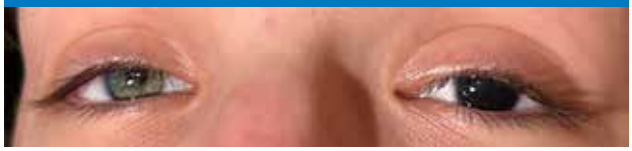


Figure 3. One of Hayley's senior high school photographs for the Rapid City Stevens Class of 2025. Published with permission.

Hayley is the reason I want to become a doctor, specifically one practicing in the Midwest. From blasting Taylor Swift in the operating room to getting a stuffed animal with a matching eye patch to her, the care she has received is unparalleled. The doctors, advanced care providers, and nurses in Rapid City have watched her grow up and become a huge part of her support system. She has faced an alternative high school experience, missing about half of her freshman and half of her junior years of high school. Through it all she has battled 6 surgeries, countless laser procedures, and complications courageously. I am so proud to be her big sister. She has had to fight and risk losing something many take for granted: their vision. Hayley graduated from Rapid City Stevens High School in 2025. She received a full-ride scholarship through the Build Dakota for nursing. I know she will be an empathetic and empowering nurse who advocates for other medically complex infants and children!

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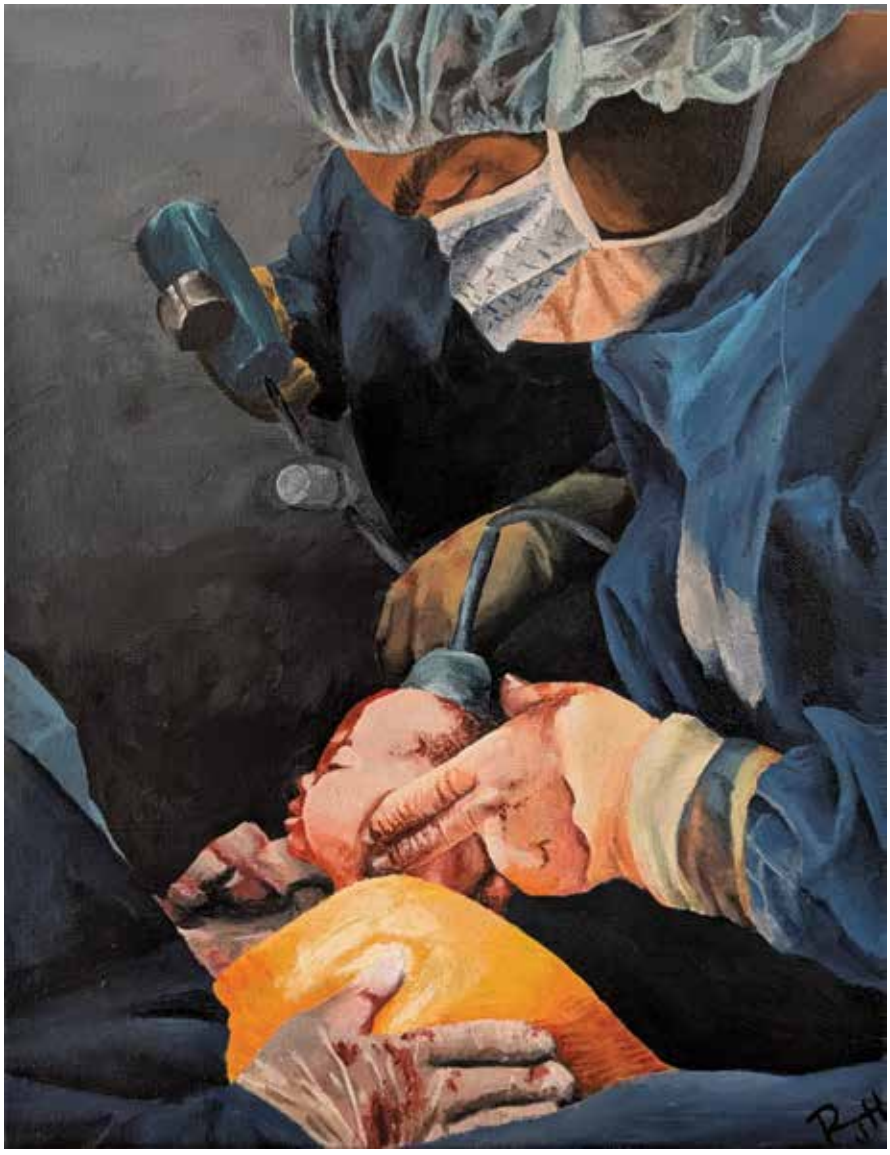
First Exposure, a Self-Portrait

Rylee Honomichl, MS II

On April 16, 2002, at 8:24 am, James Honomichl, my father, captured the moment I entered the world. The photograph he took remains my favorite image in my baby book. As a child, I giggled at how I resembled an alien with a small plunger on my head. As an adult, the image has taken on a deeper meaning: it reflects the quiet intimacy that exists between a patient and physician, the stillness within chaos, and the coexistence of hope and celebration amidst grief and fear.

This painting was inspired by that photograph and the profound impact it has had on my life. It honors the events prior, Dr. Gudvangen's care that saved both my mother and her uterus; the actions during, as he delivered me safely; and everything that followed, as I admired that moment and discovered my calling to become a physician.



Rylee Honomichl, MS II, 11 in x 14 in acrylic on canvas

Curiosity

Matthew J. Schmitz, MS III

Author's note: In this poem, I describe the role of curiosity in medicine. This is significant because understanding the principles that form the foundation of medicine leads to a fulfilling career in the field. As a medical student, my goal is to understand these principles as I continue my journey into medicine.

Born of *curare*: "to care"
Medicine begins here
"Cure," a sibling
Medicine therein
Curiosity and medicine intertwine
Their meanings equate
To be curious is to care and cure

Curiosity is questions
Knowing your unknown
Humility to ask
Awareness medicine demands

Curiosity is listening
Questions spoken, the inquiry made
Then to listen, without a word
An attentive eye, a listening nod
Evident on a face

Curiosity is discovery
From bare hands to sterile fields
From bloodletting to penicillin

Curiosity is innovation
Microbes unknown before microscopes
Invisible internals before imaging

What is curiosity?
Desiring Truth, a dependable reward
The will to search
Questions, Listening, Discovery, and Innovation
Are required

Be Curious

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Knit Together: A Personal and Evidence-Based Reflection

Abigail Polzin, MD, FACEP

During my fourth year of medical school, I prepared for an international rotation in the Philippines. Seeking a portable hobby for the long flight, I wandered into a craft store and emerged with a pamphlet, knitting needles, and a skein of yellow yarn. Armed with YouTube tutorials, I taught myself to knit, producing a comically long seven-foot scarf by the trip's end. I then began knitting hats, mittens, baby clothes, and washcloths—finding joy in crafting gifts with my hands. As my skills improved, I started knitting my own garments and more complex projects. I began frequenting local yarn stores, connecting with "yarnie" friends, and attending knitting conferences. After more than 15 years, the craft has become a big part of my life. Mornings are sacred: I knit with a cup of coffee and make a little progress on a project to start my day. Knitting's portability makes it ideal for my busy life: I can knit during breaks, at conferences, on road trips, and at sporting events. Once, when asked to remove my metal knitting needles at Dodger Stadium, my husband assured security that I am safer with my knitting than without it! As knitters have found for centuries, I can set the project down when duties call and pick it back up easily. If too many days pass without knitting, my fingers itch to hold the needles, a physical reminder of the calm it brings.

I am not alone: many clinicians find that knitting and other crafts offer a vital creative outlet, countering the emotional and cognitive demands of medicine, while also honing fine motor skills. The appeal lies in simplicity and versatility. Repetitive hand movements, familiar patterns, and tactile engagement with fibers create a meditative rhythm. When I crave a challenge, I can explore techniques like cables, colorwork, or construction methods, each pushing my creativity further. My anatomical knowledge informs my craft, allowing me to design garments that fit perfectly, whether for myself or those I deem "knit worthy." Wearing these creations on cooler days fills me with pride. These handmade garments are tangible reminders of the ability to create patterns and function from the chaos of loose yarn.

Medicine is relentless. Physicians navigate life-and-death decisions, work long hours, and often suffer emotional exhaustion, with approximately one in three experiencing burnout symptoms at any given time.[1] For me, knitting is a counterbalance. The repetitive motions—knit, purl, knit, purl—mimic mindfulness practices, slowing my heart rate and quieting my mind after a grueling shift. Research underscores knitting's therapeutic potential. A 2024 review of twenty-five needlecraft studies, including knitting, found consistent evidence of improved mental well-being, with one study noting reduced compassion fatigue and burnout symptoms among oncology nurses using knitting as a therapeutic tool.[2] When our department adopted a pickle theme to boost morale, knitting thirty pickles helped me bond with my teammates in a unique way! In another publication, over 8,000 crocheters reported feeling calmer, happier, and more useful after crafting.[3] A 2013 study from the University of Gothenburg found that knitting induces a meditative state, reducing anxiety and fostering emotional clarity in individuals with mental health challenges.[4] Knitting promotes relaxation and improves focus among medical students, potentially mitigating stress-related burnout.[5] Another survey found frequent knitting correlates feeling calm and happy, with 81% of respondents knitting for relaxation and stress relief.[6]

Knitting sharpens both mind and body. As a physician, I rely on fine motor skills for procedures like suturing and intubation; knitting hones this dexterity. I joke with patients that placing sutures feels like "doing crafts on humans," a lighthearted nod to how knitting's precision enhances my technical skills. In 2018, Dr. Acosta, a neurologist, knitted a replica of Einstein's brain, displaying needlecraft's precision in a medical context.[7] Studies compiled by the Craft Yarn Council show that knitting enhances fine motor coordination and cognitive function, particularly in aging populations.[8] Frequent knitters report higher cognitive functioning, a benefit I hope will keep my mind sharp as I age.[9] Schoolchildren taught to knit showed improved inhibition control, akin to meditation, suggesting cognitive benefits applicable to physicians, and learning new needlecraft skills fosters mastery and confidence.[5,10]

Medicine can be isolating, especially for rural physicians or those working odd hours. Knitting counters this through

community. My visits to the local yarn store introduce me to a diverse group of "yarnie" friends—teachers, librarians, engineers, retirees, and even other physicians—who share patterns, stories, and laughter. Knitting conferences, with their workshops and yarn markets connect me to a global community of creators. Group knitting significantly improves perceived happiness and social contact, with 54% of survey respondents reporting enhanced communication with others.[3] Engaging in arts and crafts predicts increased life satisfaction and happiness, supporting knitting's role in combating caregiver isolation.[11] Fiber arts can foster a sense of belonging, with online forums like Ravelry.com amplifying this community.[2] While knitting's benefits are clear, physician-specific research remains limited. Studies suggest knitting's potential to build empathy and resilience in medical training and practice, along with the potential for reducing burnout.[2,5,6] Medical institutions could promote knitting as a low-cost, accessible wellness tool through hospital-based knitting groups or workshops, at a low cost to initiate.

For physicians, who often suppress emotions to maintain professionalism, knitting facilitates emotional healing. A doctoral project on fiber arts as art therapy suggests that knitting helps process shared trauma, a concept echoed in discussions of embroidery as a "bridge between fractured inner worlds".[6] Knitting has been used as therapy for disaster survivors and grieving families, a practice I mirror when knitting a baby hat in memory of a difficult case.[2] The act transforms grief into a gift, soothing the emotional wounds and reinforcing my capacity to care.

Knitting transforms how I navigate medicine's challenges. It is a creative outlet that grounds me, connects me to others, and sharpens my skills, all while offering pride in tangible creations. For physicians, hobbies are a reminder that we, too, need care. I urge my colleagues to pick up any creative pursuit, not just for personal joy, but to sustain the empathy and humanity that define our work.

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Medicine and Art

Ann Milliken Pederson, PhD

I am addicted to two British reality television series. Both *Sky Arts Landscape Artist of the Year* and *Sky Arts Portrait Artist of the Year* take the viewer on a journey into the landscapes and faces of Britain. The artists use different mediums to complete their art work: oils, acrylics, pastels, linocuts, watercolor, and biros. Each episode tells a brief story about each of the artists, shows the progress of their work, and notes the critiques made by the judges. The pace and intensity of the competition absorb my attention.

Dame Joan Bakewell, an English journalist, broadcaster, and member of the House of Lords, co-hosts both *Sky Arts Landscape Artist of the Year* and *Portrait Artist of the Year*. She begins each episode with her famous words: "You have four hours and your time begins now." From that moment onward, eight or nine artists have four hours to complete their work as well as compete for a final prize having their art displayed in a famous setting like the National Portrait Gallery in London. These shows provide a tonic for anyone who needs a creative distraction.

I'm being treated at Sanford Oncology and MD Anderson Cancer Center for solitary fibrous tumors, a very rare sarcoma that affects about one in a million people. I started watching these arts series when I was having some rougher days after a Y90 procedure that I experienced at MD Anderson Cancer Hospital in Houston, Texas. The nausea and fatigue, along with an unrelated upper respiratory infection, kept me couch bound for days on end. I was too tired to read anything–not my mysteries, not the poetry of Mary Oliver, not *The New York Times*. I wanted to stream a show that wasn't boring or saccharine.

A wise artist friend recommended that I watch the Sky Arts Series. At first, I watched as an outsider to the world of the visual arts. I realized that I am someone who, in general, doesn't *see* well; I don't pay close attention to my surroundings. That's why I loved the section of the series when the three judges would discuss each of the paintings. My own perspective is very limited, but when I opened my eyes to the viewpoints of the artists, I began to observe more colors, shapes, and movement in their work.

I have a deep appreciation for the visual arts. I grew up going to art museums, and looking at my mother's coffee table books of her favorite artists like Winslow Homer and Edward Hopper. I have no background in the visual arts beyond my deep appreciation for them. I don't paint; I'm not a visual artist. I have several friends who are artists and Gary, my husband, is a watercolor artist. We now have a membership to the Museum of Fine Arts of Houston which is very close to MD Anderson Cancer Center. Artists are teaching me how to pay attention. The very act of looking is relational and interactive and happens in each moment. Where I stand will determine, in part, what I see.

The portrait artists use warm or cool colors to create the face of their sitter. Some artists might cut out the features, or frame the face with swirls of charcoal and pen. Initially, what looks like a messy chaos of colors and shapes to me turns into an enigmatic portrait that shows not only the likeness of the sitter, but also that *something more* about the person. The human face is made up of so many different shapes, angles, and colors. The proportions of the nose, mouth, and eyes convey an emerging likeness of the sitter. The artists, while they want to capture the likeness of the sitter, can also evoke a mood, capture a context and history, or use different brushmarks to highlight an area.. The eyes seem to be the most difficult for the artist. Are the eyes the windows of the soul? Is the gaze direct or indirect? Is the gaze disrupted by something else? What about the mouth?

I'm learning that physicians who are trained not only in the science of medicine but also in its art become more compassionate and kinder physicians. They know how to look and how to pay attention. As a cancer patient, I'm unbelievably grateful for my oncologists at Sanford Oncology and at MD Anderson Cancer Center in Houston. They are masters of observation. During a visit, I am observed by the nurses, lab techs, the PA, and the oncologist. I listen to them as they interpret the CT scans or reflect on the lab results. We trade questions and responses, comment about what the next treatments might be, and, by the end of the visit, we are often trading suggestions of books to read or places to go on vacation. We are more than our roles as patient

and healthcare providers. We are co-creating portraits of people who live and work with in the landscape of a very rare disease. Seeing is much more than mere observation of numbers and images; seeing is participating in an ongoing collaborative process.

What do the visual arts contribute to the education of physicians? My experience as a patient with a rare cancer has opened my eyes to the importance of having multiple viewpoints coalesce about my kind of cancer. Engagement with the arts—especially visual art—cultivates in both physicians and patients the capacity for deeper observation, empathy, and acts of kindness, all of which are critical components of compassionate and effective medical care. The arts help physicians understand and treat the complexities of their patients. I become more than a set of numbers and scans. The vulnerability shared between the artist and the sitter can resemble the relationship between the healthcare provider and patient.

Sometimes physicians have a "flat" or "literal" view of the patient. They refer to numbers on charts and scans but never really engage the patient's humanity and story. This has not been my experience. The care that I have received at Sanford and MD Anderson has been multifaceted, and the health care providers see me in ways that move beyond the scans and labs. I asked one IR nurse why she works in Interventional Radiology and her response was: "It's my passion, my vocation." This sense of vocation was embodied in the staff, nurses, PAs, and physicians. They ALL talked about the community and mission of MD Anderson. I'm being cared for by communities and individuals who have a strong sense of their purpose, passion, and vocational commitment.

When I was in the hospital for nine days to have my solitary fibrous tumor surgically removed, my husband and I were sitting in my closet-sized room and my favorite nurse said she had a surprise for us. She came in with about six warmed blankets and wrapped them tightly around me in the wheelchair. She told us we could go outside into the winter sun (it was a warm 40 degrees) and sit for a while. The intense winter sun warmed my face as Gary and I talked about the days of recovery that lay ahead for me. Getting out of that hospital room, even for the brief time we were outside, became a turning point for me. I realized that the world was much bigger than my small hospital room. The nurse's compassion led to an act of kindness that I experienced as an opening up to the intense warm sun of a winter afternoon.

Kindness is neither partial nor merely a feeling. Kindness is action, an act of compassion. Kindness is built into the curriculum of the Sanford School of Medicine. Kindness is transformative not only for the healthcare provider but also for the patient as well. The excellent physician cannot separate the art and science of medicine and as a result shows both compassion and kindness to the patient. Nor for the patient who is more than their disease. They are two intertwining ways of observing and caring for a human being. The more we learn to pay attention the more we become open to the mystery of the world. Each and every time, that mystery opens my view to the wider and deeper dimensions of life.

What is it like having a very rare cancer? I know how I would paint my own self portrait. I would want multiple views of myself. In the background of the painting, I would draw numbers from blood tests and images from scans. In my painting, insides and outsides would merge onto a bodyself that multiple surgeries have scarred. And as you look into my eyes, you'd see the reflections of all the people who surround me with compassion and acts of kindness. This is what I'm learning to see: that while I'm a patient with a rare cancer, I'm also much more than that. I see myself with and through the eyes of others, a portrait that is still being painted.

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Angel's Landing: Finding Medicine in Nature

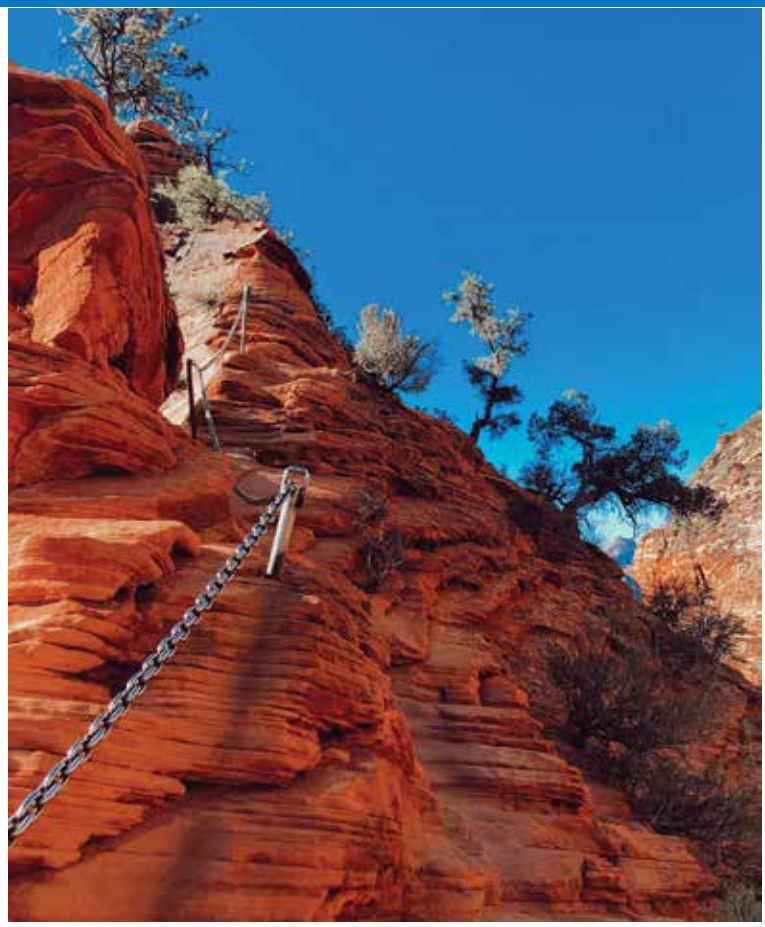
Gabriella Beberg, MS II

Angel's Landing is one of the most daunting hikes in the United States. Located in Zion National Park, this 5.4-mile hike is home to incredibly steep inclines and a narrow trail across sheer cliff faces. In some spots, the trail is only as wide as your body, and a chain is the only thing keeping you from tipping off either side.

The summer before I started medical school my mother and I set out to conquer this treacherous trail. However, a month before we planned to leave, my mother competed in the OC Marathon in California. This marathon was the 23rd she had run in her lifetime, and she was well-prepared in her training. Despite her experience and preparation, she felt an excruciating popping sensation in her groin at mile 24. She managed to complete the race, but she later found out that she had torn her labrum – a partial consequence of her severe hip dysplasia. She was recommended for a total hip replacement as soon as possible.

My mother was adamant that she wanted to complete Angel's Landing before undergoing surgery, so the next month we set out for Zion. At the very first incline on the trail, I knew that it would be a struggle. With every step that my mother took her hip would lock, and she had to maneuver her hip every which way to release it from that position. I could tell that she was in pain, but I could also see the determined

Figure 1. A view from Angel's Landing.



look she had in her eye to complete this trail. Switchback after switchback, we slowly made our way to the top of the first incline. Then, we hit the next section of the trail. Less than two feet wide and garnished with a chain, this section surely gave Angel's Landing its renowned name. One step in the wrong direction and you were met with a direct view of the far away ground.

I pleaded with my mother to turn around; if her hip locked during any part of this section, she would have no space to safely unlock it and continue with the hike. But she was determined like no other and assured me that she could do it. So, step by step we made our way across the cliff face, grasping the chain tighter and tighter as the path impossibly continued to narrow. My mother's hip did not lock even once as we trekked on.

When we reached the top of the trail, we sat in a moment's silence to overlook the view. It was stunning, and the sheer beauty of the mountain range was enough to steal your breath away. The red hue of the rocks seemed to juxtaposition the clear blue sky, and the speckles of trees viewed from such a high vantage point spoke as a reminder that the world is larger than we can see with our own eyes. As we sat staring at the expanse, I couldn't help but think about how amazing the human body is. Through a potent mix of pain and perseverance, my mother was able to accomplish her goal of completing the hike. The entire way she battled through that broken part of her body all because she had a goal in mind. She taught me that it is not just our bodily limits that dictate what we are able to do, but also our mindsets. The art of healing is similar in that way, and I now know that as a physician, I want to be able to help my patients heal both physically and mentally. Because healing is not just for the body, but also for the mind.

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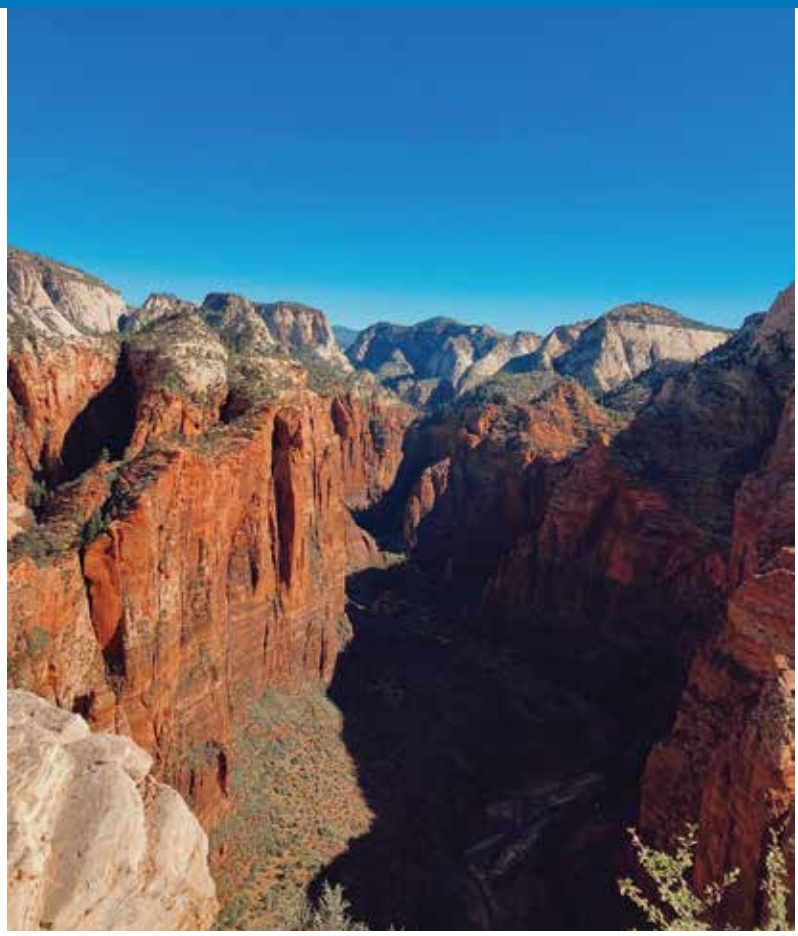
Figure 2. The reward at the top.



Dementia

Douglas W. Lynch, MD

Author's note: The poem is based on the journey of my mother who was diagnosed with dementia. I reflect on the feelings and struggles associated with that diagnosis.

Her memory and recall beginning to slip away
The neurons and synapses starting to fray

The conversations going round and round
Her brain is no longer totally sound

She took and failed the memory test
The results make it difficult for me to rest

An MRI was ordered to assess her brain
Challenging thoughts were hard to refrain

Vascular dementia, Alzheimer's, or both
The findings forced me to take an oath

The results and plan she was told
Her car and home now both sold

Into assisted living is where she moved
Her health to hopefully be improved

Her memory varies from day to day
Challenging to know what to say

For answers to questions are hard to find
The words and vocabulary not in her mind

She realizes that something is not right
But I try hard not to cause her fright

She now forgets that she forgets
The challenges this disease begets

I pray and hope for her mind to clear
To suffer the same fate, I truly fear

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Eugenics: The Poem

Henry Travers, MD, FACP

Abstract

The eugenics movement from the late 1880s through the mid-1930s enlisted medicine to marginalize those persons deemed defective, subjecting them to institutionalization and involuntary sterilization. The social attitudes behind the movement were captured 200 years before by a 17th century French physician-cleric, Claude Quillet, in a lengthy poem about how a society could produce "beautiful" children. While poetry is an important element in the medical humanities for developing empathy, it may also illuminate the *parti pris* of social change.

Poets, said Bethanie Humphries of The Poetry Foundation, "try to recreate experiences using language to forge new connections..."[1] Kwok et al recognized this in medicine, noting poetry's emergence "within the limited spaces between the medical humanities and clinical care."[2] Poems may also, inadvertently, presage those "scientific" paradigms arising not from observation and experiment, but from social attitudes. One example came from a 17th century French physician-cleric whose views of heredity, race and the status of women found a modern expression in the eugenics movement of the late 19th and early 20th centuries. A product of the Enlightenment led by the scientific revolution of the 16th and 17th centuries, this poet (and, perhaps, his translator) held the physically or mentally imperfect person unworthy of life or soul.

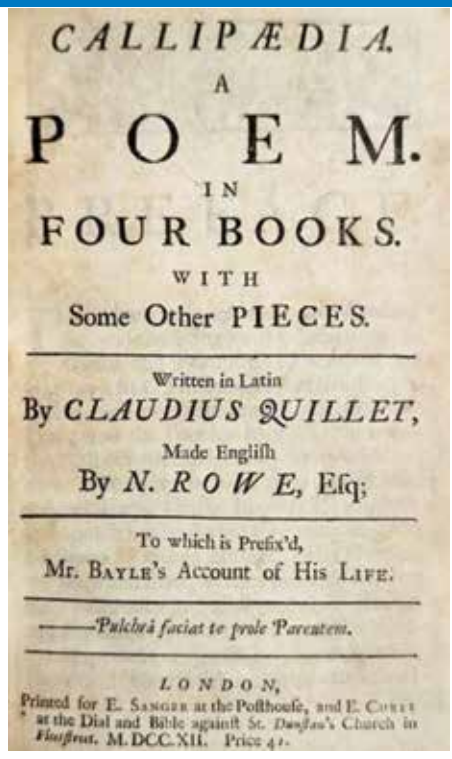
Charles Darwin's cousin, Francis Galton, coined the term "eugenics" in his 1883 book *Inquiry Into Human Faculty and Its Development*, and described it as "the conditions under which men of a high type are produced."[3] Clothed in the legitimacy of genetics, eugenic ideas led to forced sterilization and institutionalization of those deemed unfit, and restrictive marriage laws.[4]

In the mid-1600s, in northern France at the Pas-de-Calais, the abbot of Doudeauville, Claudius Quillet, a physician writing under the pseudonym of Clavidus Laetus, published his Latin poem *Callipaedia seu de Pulchrae Prolis Habendae Ratione* (Callipaedia or on the Reason for Having a Beautiful Child) in Holland. Through its 4 books, the poem touched on theology, reproductive biology and history while providing guidance about producing beautiful children to preserve the Gallic "race". Subsequently translated into French and English (in 1712), the poem was said to be quite popular.[5]

The English translator, poet laureate Nicholas Rowe (1674-1718), buried now in the Poet's Corner of Westminster Abby, was better known as a playwright who, among other works, compiled a critical edition of Shakespear's plays. In the Preface to Quillet's poem he told his readers:

> The Present pretends not to the Name of a literal or close Translation, but gives the Author's Meaning with a Freedom of Verse, that was necessary to make it agreeable to the English Reader.[6]

Figure 1. Title page of Rowe's translation of the Quillet poem.


CALLIPÆDIA.
A
POEM.
IN
FOUR BOOKS.
WITH
Some Other PIECES.
Written in Latin
By CLAUDIUS QUILLET,
Made English
By N. ROWE, Esq;
To which is Prefix'd,
Mr. BAYLE's Account of His LIFE.
——Pulchrâ faciat te prole Parentem.
LONDON,
Printed for E. SANGER at the Posthouse, and E. CURLL at the Dial and Bible against St. Dunstan's Church in Fleetstreet. M.DCC.XII. Price 4 s.

Quillet initially included verses critical of Cardinal Julius Mazarine (1602-1661), chief minister to the French kings Louis XIII and Louis XIV. These, Rowe noted, "were left out of the Paris Edition" which was dedicated to Cardinal Mazarine. The omission was Quillet's concession to the Cardinal after receiving the latter's forgiveness, a gesture that included appointment as an abbot.

The core theme of the poem was the generation of beautiful children through the application of author's precepts on the subject.[1]

> Whene'er in times to come it shall betide,
> That the kind Bridegroom would instruct his Bride,
> My Verse shall by the skilful Youth be read
> To the dear Partner of his Nuptial Bed;
> The Muse instructive shall their Off-spring grace,
> And form the future Honours of their Race:
> Beauty the long successive Line shall crown,
> And no deform'd unsightly Birth be known.[B1-8,9]

The last line above can be taken two ways: either the couple's children will, following Quillet's advice, be perfect, or, if imperfect, will not be recognized as part of a family. Quillet continued with a history of man beginning with the perfection of beauty personified in *Pandora*, but oddly constructed that history flowing from Jove and other Greek gods while only rarely incorporating Christian tenants (the fall from Grace).

> Such Beauty was in our first Fathers time
> While yet the youthful World was in its Prime.
> But when pernicious Change invading spread,
> And Error blind mistaken Reason led,
> The swift Contagion reach'd the lovely Maid.[B1-15,16]

Pandora opened her Box and consequentially "No part was left untainted in the whole."[B1-16] At this point Quillet abandoned the historical tale and proposed a philosophy of racial purity that included the idea that the "Deform'd and Foul" should never have souls.

> Not every Man or Woman was design'd
> To propagate and multiply their Kind;
> Forbid we rightly the Deform'd and Foul,
> To clothe with ill-shap'd Limbs the heav'nly Soul.[B1-21]
>
> But he who judges right of what is fair,
> With healthy Sons will healthy Daughters pair;
> As underperforming useless *Drones*, we drive
> The *Weak* and *Sickly* from the *Marriage-Hive*.[B1-22]

Quillet wrote that "weak and sickly" traits were inherited. He extended that theme to include marriage partners.

> Whence by Traduction from the Father run
> Ill Habitudes intail'd upon the Son;
> The latent Poison in the Bowels grows,
> And propagates a Family of Woes.[B1-22]
>
> When the true Cause of their repeated Blame,
> From a distemper'd feeble marriage came.[B1-23]
>
> The nuptial Knot should be with Equals ty'd,
> No sanguine Bridegroom to a sapless Bride.[B1-24]

Disparaging, for the sake of the race, the then-common practice of marriage between older men and younger women, Quillet said:

> When Youth and Age are coupled for the Breed,
> Diseases in a sickly Train proceed;
> And if at last a weakly Offspring's born,
> How oft his wretched Being he will mourn?[B1-25]

His views of older, often widowed and wealthy, women with younger men were similar:

> If for connubial Joys enrag'd the thirst,
> To sate her greedy and impetuous Lust;
> Some younger Brother will perhaps incline
> To pay his Homage at her Golden Shrine;
> Who with dissembled Love will fondly run
> To kiss the wither'd wealthy Skeleton;[B1-28]

Suggesting women marry early ("Expect with Patience, till

1. The quotations retain the original spellings and formatting from Rowe's translation. The notations after each quotation refer to the Book number and the page number (e.g. B1-22) in reference 6.
2. The legal age for marriage in 17th century England was 12 for girls and 14 for boys.

the rolling Sun has twice six Times his Annual Journey run"[B1-30]),[2] Quillet also favored early childbearing ("Till her maturing Years begin to bloom, And promise early Offspring in the Womb"[B1-30]). His advice for young men, though was not the same: "Advis'd defer the Work, till time produce A more mature, and well concocted juice."[B2-39]

Quillet's knowledge of reproductive biology was that of the 17th century and depended upon Aristotle's science.[7] He commented on the origin of semen from the "inward Life", perpetuating an ancient concept of semen flowing in veins.

> There with a piercing and more subtle Heat,
> It forcibly ferments the passive Meat;
> Which by the Fibres of the Stomach wore,
> And for Digestion half prepar'd before,
> Lessen'd and chang'd, a milky Colour takes,
> And a quick Passage to the Liver makes;
> There chang'd again, a ruddy Tincture gains,
> And flowing onward flushes in the Veins.[B2-39]

Beginning with verses about syphilis ("Beside, beneath these Stars that Plague arose, Which fiercely in the Seats of Pleasure glows"[B2-43]), Quillet lamented racial degeneration ("How wide *Deformity* had spread her Reign"[B2-44]) and marshaled the Greek gods to set mankind aright. From this gathering, he derived a focus on producing male offspring. To that end, he told pregnant women not to drink alcohol.

> If to a *Male* thy eager Hopes aspire:
> For all must own the generative Flood
> Is form'd, and temper'd from the Mass of Blood.[B2-58]
>
> Again, the Morning for a *Male* is best;
> The Seed maturing in the Time of Rest.[B2-61]
>
> Hear then, ye Wives, who to a *Male* incline,
> Nor blush to heighten your Repast with Wine.[B2-59]

In the poem's fourth and last book, Quillet again invoked heredity in the upbringing of sons while suggesting the sin of lust could be transmitted through the milk of "wanton" nursemaids.

> The purer Blood with nobler Warmth inspires,
> And virtuous Sons descend from virtuous Sires.[B4-99]
>
> That from bad Teats, and putrid Channels pass,
> And taint the Blood, and mingle with the Mass;
> Th' unthinking Babe sucks in the deadly Bane,
> And new-form'd Lusts the native Vertue slain:
> Who draws the flaggy Breasts of wanton Dames,
> Shall base Desires imbibe, and burn with guilty Flames.[B4-99,100]

Reflected in Quillet's poem were two conceptual transitions about imperfect offspring spanning ancient to Enlightenment times: from preservation of family to preservation of all humanity and from parents as bystanders to parents as causal agents. Eugenics incorporated the later concepts, promoting as just any means necessary to improve a race. Thus, the imperfect person – whether slow-witted, deformed, or diseased – became an unpleasant threat that had to be removed. Elements of eugenics persist today,[8] a bias that continues to challenge our humanity.

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Medical Student Mission Trip to Guatemala – Lessons Carried Home

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Figure 1. Team group photo at Patulul.

Introduction

This June, 19 students and 4 physicians traveled to Guatemala for SSOM's Guatemala medical mission trip. During our clinical experiences, we encountered numerous circumstances that called for adaptability, creativity, and other essential qualities in patient care. To reflect on these moments, students contributed a brief narrative describing their experiences. These reflections capture not only individual perspectives, but also the shared values and approaches that shaped our collective learning. By sharing these stories, we hope to highlight recurring themes that will continue to shape our future practices as physicians.

Kindness

She was our first patient of the day—hunched over, wearing a traditional Guatemalan skirt, and looking utterly exhausted. "What brings you in today?" we asked. *¿Qué la trae por aquí hoy?* She had been experiencing abnormal uterine bleeding for months, with some days so heavy, she couldn't leave the house. She looked fatigued, with pale conjunctiva and dark circles under her eyes.

A quick consult with our OBGYN attending brought her back to the ultrasound table, which showed a large, asymmetric uterus filled with fibroids. After failing multiple medical interventions, hysterectomy was the only option. As we rushed to coordinate a surgical consult, pool money for progesterone, and gather iron supplements, she gently stopped us.

Figure 2. Clinic overlooking San Jose Xiquinabaj.

Figure 3. Leah Naasz, Rebecca Hofer, and Dr. Ashley Briggs ultrasounding a patient.

"I have no children and my parents are gone," she said through the translator. "I am the only daughter of 12 brothers. There is no one to take care of me. The fact that you are means so much."

Behind the makeshift curtain, we all sat for a moment, tears in our eyes and arms embracing one another. For a moment, healing wasn't about medication or a solution. The healing was in the hearing of her story and the compassion to offer a hand.

Connection

The true heart of our trip was not the treatments we administered, but the genuine human bonds we formed. Even when our resources were limited and we spoke different languages, the warmth and appreciation we received revealed that, at its core, medicine is connection.

Figure 4. Tiffany Knecht, Christina Lusk, and Dr. Ashley Briggs with a patient.

Connections with translators were essential, not only for language, but for building trust with the community. Their grasp of language and culture created a safe space for patients to share openly, turning simple conversations into meaningful ones and allowing more compassionate care.

Every day, we encountered families who shared smiles, stories, and unwavering hope. Each warm smile from an elderly patient, shy laugh from a child, heartfelt "thank you," and quiet "God bless you" affirmed that our presence–our simple desire to help, listen, and learn–truly mattered.

On this trip, the immense gratitude we received reminded us that impact does not always require elaborate treatments. Sometimes, the most meaningful part of medicine is not what we do, but how we show up–with compassion and a willingness to connect. In the end, it was those simple, human moments that left the deepest mark.

Creativity

Practicing in a resource-limited country is challenging, but it fosters reliance on physical exam skills, sharper clinical reasoning, and creative problem-solving to provide the best care possible.

On our last day of clinic, a woman presented with headaches and dysuria. Initially, these appeared to be two separate complaints. Her headaches could have been explained by dehydration, and her dysuria and urinary frequency to cystitis. However, careful history-taking revealed consistent access to clean water, and review of systems was positive for polydipsia and polyuria. Moreover, she appeared well-hydrated, with no suprapubic tenderness.

After glancing again at her vital signs, we noticed that her blood glucose was not listed. The triage table had run out of

Figure 5. Drs. Megard, Withrow, and Bostwick with students Ellie Goetzinger, Ellie Blue, Rebecca Hofer, and Maureen Hurley at the pharmacy.

glucose test strips the day prior and were unable to measure her blood sugar. However, we did have urine dipsticks remaining. Sure enough, her urine was negative for markers of infection but positive for 3+ glucose. Through a thorough history and physical exam, combined with creative use of our remaining resources, we were able to provide this patient with a diagnosis and treatment for a chronic disease she didn't know she had.

Adaptability

We arrived at our location for clinic on our second day: a one room cement building alongside a busy road. Construction vehicles roared by, drowning out conversations with patients while our ears strained to appreciate heart and lung sounds on exam.

Not only are we used to clinics with more testing and treatment options, we are also accustomed to simpler things like private exam rooms, quiet spaces for taking a history, and EMR documentation of prior visits. But here, clinic encounters were held across folding tables in a single room surrounded by five other groups of patients and providers. We had to adapt quickly in order to effectively treat our patients, becoming comfortable in an environment that was sometimes uncomfortable.

Medications also provided an opportunity for adaptability, as we often didn't have first-line treatments available to us, even for conditions common in the United States. This was the case for a young mother who came to us with classic migraines. If she were a patient in South Dakota, she'd have been a perfect candidate for a trial of triptans. Unfortunately, we didn't have any; nor did we have propranolol for migraine prophylaxis. So instead we relied on our knowledge of pharmacology and dispensed the closest medication we had: metoprolol. After ensuring we abided by our obligation to "do no harm", we provided her with the medication, as well as Excedrin tablets to alleviate her pain. She left smiling and hopeful, and we were thankful for our background knowledge and adaptability to provide her a prophylactic treatment.

Sometimes first-line treatment boils down to what you have on hand. Sometimes listening to a patient requires waiting for a truck outside to pass. As the second day progressed, so did our appreciation of shared smiles, of pauses in conversations, as did our skills in listening to the individual in front of us during the quiet moments we had together.

Trust and Compassion

Despite language barriers, time constraints, and cultural differences, our patient-physician relationship remained built on respect and trust. One of the first patients I saw was a young mother and her daughter. The daughter had a stiffening and discomfort in her legs, as well as both physical and intellectual developmental deficiencies. With our medical history and physical exam, we determined the little girl likely had a spastic form of cerebral palsy. As providers in a foreign country with already limited supplies and resources, there was little we could do to help. Still, I will never forget the mother's trust and gratitude that we took the time to listen and evaluate her daughter. Our patients showed us immense respect and trust while displaying their resiliency and humility in the face of extreme hardships.

Another example was a man who arrived right as we were packing up clinic. He struggled to speak as he described the pain in his mouth. He had an appointment with the dentist in a few days, but heard about our clinic and had traveled to seek help. Upon examination, I saw he likely had a dental

Figure 6. Last day of clinic at Patulul.

Figure 7. Tanner Berg, Olive Henicke, and Dr Dave Withrow with a pediatric patient.

abscess. Although we had turned off the charting system for the day and packed up our medications, we knew we couldn't turn him away. With the help of an attending, we were able to treat him with antibiotics to carry him through the weekend and explained the importance of visiting the dentist.

Going the extra mile for a patient can assume many forms. Whether it is unpacking a suitcase of medications after the clinic has closed, or spending the time to sit and listen, even when there is no solution to be had, we know that even when resources are limited, trust and compassion are not.

Cultural Humility

During an outreach day, we found ourselves surrounded by a group of curious children eager to interact and converse. At first, making connections was difficult as we did not share a common language and were unsure how to meaningfully interact without words. But the children took the lead, grabbing a soccer ball and encouraging us to join in on their game. We played "futbol" outside the clinic in the 95-degree heat, sharing belly laughs, forming connections that went beyond language.

We attempted conversation with a few of the children in our broken Spanish, bridging the gap with simple phrases and big smiles. We were humbled to learn from them, realizing that meaningful connection did not require perfect Spanish, but rather openness and mutual respect for our unique circumstances.

This day taught us about what cultural humility truly means: entering someone else's world with curiosity, lack of judgement, and a willingness to learn. Choosing to listen before leading, we followed their cues and built trust and friendship. Even though we did not speak the same language, we were still able to form a deep human connection. The lessons learned this day will follow us throughout our career, especially in cross-cultural clinical settings, where humility, a willingness to learn from one another, and forming a connection with others are the foundations for care.

Figure 8. Josh Schumacher, Carly Cooper, and Holly Goehring with a group of children.

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Life's Garden

Charlie Babcock, MS II

I wake up at the morning break,
Head to the hospital, sit and wait.
Moms come in, ready to go,
It's time to push, as they've been told.

With patience and struggle, the baby appears,
Love spills out in the form of tears.
Life breathes new light, a baby is born,
A family walks in and leaves with more.

Oh, this building holds all stages we live,
As some begin, others will end.
The other side may seem dark and cold,
Yet love cuts through for young and old.

Shift change comes, and my work is done,
I get home, change, and go for a run.
Laps at the cemetery is where I find peace,
Among the lives of those now deceased.

Families gather as a loved one disappears,
Yet love shows up, once again, as tears.
Fresh-turned soil begins to harden,
But flowers remain—this is life's garden.

All in one day, I see birth and the grave,
Decisions I'll make may kill or may save.
What can I say when the losses remain?
Love will endure, through the sun and the rain.

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Beyond Titles: Becoming a Leader in Medicine

Carly Alley, MS II

Author's note: This reflection examines the evolving definition of medical leadership, drawing on ideas I learned after attending a national conference for rising second year medical students this past summer. It focuses on how leadership goes beyond a formal title and includes presence and values we embody in everyday interactions with patients and colleagues.

This past June for three days, nearly 100 student leaders from over 40 medical schools across the country gathered to explore what it means to lead in medicine. The conference, set in Washington, D.C., was the perfect place to reflect on the crossroads of leadership, medicine, and life. Being in the capital where momentous decisions unfold shifts the way one thinks about leadership, as well as bringing a quiet gravity to the gathering. It was hard not to feel the weight of past leadership, the magnitude of current possibility, and the call to imagine the kind of future we might help build.

The conference invited us to explore leadership in medicine not as a title or a fixed role, but as an evolving, living practice. Between keynote sessions and small-group workshops, we examined not only what it means to lead effectively, but also how leadership is shaped by identity, purpose, and personal growth.

Storytelling: Know Your Why & Find Your Brand

One workshop challenged us to think about our personal "brand", or the core narrative that shapes and defines who we are. For me, my brand is rooted in my "why", which lead to reflecting on my journey to the decision to pursue medicine. It wasn't a dramatic epiphany, but rather a gradual realization that my purpose lives at the intersection of science, service, and human connection. Personally, medicine is not simply a career; it's a responsibility and commitment to something larger than myself. We are entrusted with the well-being of patients, which is a privilege and deeply humbling. I learned that leadership starts with knowing your own story well enough to share it with clarity and conviction. My story, my brand, is one of integrity, authenticity, scientific curiosity, and a belief in medicine as a calling to serve others.

The Power of "Yet" – Be a Lifelong Learner

The single word "yet" is powerful. It allows us to reframe gaps in knowledge and skill not as failures, but as opportunities for growth. Leadership and learning are intertwined. In medicine, there are always new perspectives to consider, new materials to understand, and new discoveries to be made. Every patient encounter, every collaboration, and every misstep is a chance to grow as a physician. The leaders I met at the conference embodied this mindset. They do not lead because of a title, nor do they seek recognition. Instead, they lead with a focus on creating positive change. By embracing the power of "yet", limitations turn into possibilities, driving our growth as lifelong learners.

It is easy to become absorbed in the day-to-day grind of medical school, and leadership can often feel like a checklist to complete. However, attending this conference reframed leadership for me. One quote struck me deeply: *"Leadership is a behavior, not a position."* This simple yet profound statement emphasizes that leadership isn't about titles or authority; it's about how we act and the values we embody. The heart of leadership in medicine lies not just in technical skill, but in presence, in how we interact with patients, listen attentively, and show empathy and compassion.

After the conference, the definition of leadership I knew had expanded. Now, I carry with me the question: *What kind of leader will I be?* The answer won't be found in a title but will emerge with each decision and each interaction I make, which are grounded in the values that brought me to medicine in the first place.

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Between Land and Learning

Lucas Goetz, MS III

During a short break from medical school, I visited the Pine Ridge Reservation and Badlands National Park. The wide-open landscape, the quiet, and the feeling of being far from daily routines gave me space to think about the kind of physician I want to become. As a medical student, I'm often focused on clinical details and fast decision-making, but this experience reminded me of the value of slowing down and observing. These photos and reflections capture moments from that trip that helped me reconnect with the bigger picture: why I chose medicine in the first place, and how profoundly environment, history, and cultural awareness inform how we listen, connect, and care for patients.

I took this photo while standing above the Badlands. The landscape felt massive and still, something that's easy to forget during busy clinical days. Looking out over the horizon, I thought about how much the environment shapes people's health and perspective. For me, this trip was a reminder that learning medicine isn't only about facts and exams, but also about paying attention to where we are, what came before us, and how to slow down and observe.

We came across these two bison while visiting a local ranch near Pine Ridge. They moved slowly, calm and focused, seemingly unbothered by our presence. It was a quiet moment, but one that made me think about resilience—how these animals have endured so much change and remain part of this landscape. As I prepare for a career in medicine, I'm learning that resilience can take many forms: in patients, in communities, and in nature. Sometimes, simply being present and paying attention is enough to learn something valuable.

I took this close-up while walking through the Badlands. The cracked, layered surface caught my eye. It reminded me of how things that look rough or broken at first can have structure and meaning when you take the time to look closer. That's a mindset I'm trying to bring into medicine: being careful not to judge too quickly and remembering that there's often more beneath the surface in a patient's story or a community's needs.

These moments reminded me that becoming a good physician requires not just knowledge, but also presence, humility, and the willingness to keep learning from the world around us.

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AMA Medical Student Advocacy – South Dakota Impacts

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Rural communities in South Dakota face significant challenges, from physician shortages to inadequate maternal healthcare. As medical students committed to addressing these disparities, we collaborated with like-minded medical students around the United States to drive meaningful change. We attended the American Medical Association (AMA) Medical Student Advocacy Conference in Washington, DC, to advocate for policies critical to sustaining rural healthcare. Surrounded by passionate peers at the AMA's largest medical student gathering, we raised our voices, championed the future of medicine, and reinforced our commitment to ensuring no community is left behind.

One of the first issues we addressed was the underlying cause of the physician shortage.

This came in the form of Medicare physician reimbursement facing critical challenges due to payment cuts, lack of inflationary adjustments, and increasing administrative burdens. Since 2001, physician payments have declined by 33% when adjusted for inflation, placing significant financial strain on healthcare providers–particularly in rural states like South Dakota. This leads to physician burnout and closures of numerous rural clinics, exacerbating the already significant physician shortage. The impact of this burden has already presented itself in the form of three clinic closures across South Dakota. High costs and the scarcity of qualified personnel have driven Winner Regional Health, Coteau Des Prairies Health Care System, and Philip Hospital to terminate their OB-GYN services.

Additionally, one of the most pressing concerns is the annual reduction in Medicare payments, with a scheduled 2.8% payment cut in 2025—the fifth consecutive year of decline. These policies highlight how budget neutrality rules and Merit-based Incentive Payment System (MIPS) penalties disproportionately harm small rural practices and providers. Rural practices serve as lifelines to small communities across South Dakota, and these payment cuts threaten the financial viability of South Dakota's healthcare. Continued reimbursement cuts may force physicians to limit the number of Medicare patients they treat, further exacerbating shortages and straining access to care in rural communities.

Fortunately, the bipartisan Medicare Patient Access and Practice Stabilization Act (H.R. 879) aims to reverse the 2.8% Medicare payment cuts for 2025, as well as introduce an inflationary payment adjustment. Reforming Medicare budget neutrality rules by raising the threshold could help prevent automatic cuts resulting from flawed utilization projections.

Additionally, expanding Alternative Payment Models (APMs) for specialists and rural providers could offer more sustainable reimbursement structures. These reforms are essential to preserving physician practices in South Dakota by ensuring access to care and stabilizing the healthcare system for Medicare patients.

Without Congressional action, South Dakota physicians will struggle to sustain their practices, leading to devastating shortages across the state. A significant number of rural communities have been negatively affected due to the aforementioned clinic closures. Moreover, the clinic in Sisseton, SD, served not only South Dakotans but also Minnesotans and North Dakotans, thanks to its proximity to the state border. We have already heard devastating stories from patients in these regions who chose to ignore their health rather than subject their families to the financial and physical strain of traveling hours to reach care. In the absence of comprehensive data on how this reality impacts families, we urge our readers to imagine the worst-case scenario if no action is taken.

These access challenges are compounded by national workforce shortages. Each year, approximately 44,000 medical graduates are met with roughly 41,000 available residency positions.[1] Therefore, many medical students will graduate without the opportunity to practice. With a projected shortage of 86,000 physicians by 2036, it is essential to train more physicians. The Resident Physician Shortage Reduction Act (H.R. 2389/S. 1302) aims to increase national residency positions by 14,000 over seven years, all of which are Medicare-funded.

In South Dakota, the state matches federal residency funding, but this allocation is not protected by legislation, meaning decisions to reduce or eliminate this support rest solely with the appropriations committee.[2] In January 2025, it was proposed to discontinue the $1.7 million match funded by the state. While action has not yet been taken, this underscores the urgent need to advocate for future legislation that secures residency funding in statute. We shared these details with lawmakers to forge a personal connection, reminding them that these struggles are not distant statistics but lived realities for families in their home state.

As many are aware, medical student debt is a critical barrier to training more physicians. The average medical student debt, not including undergraduate loans, is over $200,000.[3] Tuition has continued to inflate at $270,000 for public schools and $370,000 for private schools. Given that medical school loan repayment begins during residency training, recent medical graduates tend to pay more interest due to the delayed payments. The Resident Education Deferred Interest (REDI) Act (H.R. 1202/ S. 704) is a bipartisan bill proposed in the prior Congressional Session that would allow resident physicians to pause interest accrual while in training. This reduction in long-term medical school debt will help mitigate early-career burnout for new providers.

Another relevant piece of legislation for our state is the Preventing Maternal Deaths Reauthorization Act of 2023. This act would permit funding for state Maternal Mortality Review Committees (MMRCs). These committees play a fundamental role in collecting and reviewing data on maternal and infant deaths, determining pregnancy-relatedness, identifying contributing factors, and assessing preventability. Recommendations based on this data are made to reduce disparities in health outcomes. This bipartisan act was passed in the House of Representatives in the 118th Congress, but was not voted upon in the Senate at that time. With South Dakota reporting a pregnancy-associated mortality rate of 68.7 deaths per 100,000 live births—far above the national average of 18.6—continued investment in surveillance and prevention efforts is vital in mitigating risks for pregnant people in the state.[4]

Geographic isolation in rural communities puts pregnant patients at risk due to limited access to care and resources. Disparities are highest on Native American Reservations. In 2023, Lakota Oglala County had a maternal mortality rate of 184.4 for every 100,000 live births—over four times that of Caucasian patients.[4] With multiple obstetrics clinics closing throughout the state, these rates are not likely to improve without change. Sisseton Coteau Des Prairies OB-GYN services had covered much of the Glacial Lakes region of Northeastern South Dakota, even including Western Minnesota.

South Dakota has jarring rates of maternity care deserts in 56.1% of counties, as compared to 32.6% of counties nationwide.[5] The MMRC is uniquely positioned to investigate these disparities, identify systemic gaps, and offer culturally sensitive and community-driven solutions. By approving the Preventing Maternal Deaths Reauthorization Act, Congress would enable states like South Dakota to continue targeting these inequities and improving patient outcomes.

Additionally, the Connected Maternal Online Monitoring (MOM) Act (S. 712) aims to provide coverage of remote physiological monitoring devices under state Medicaid programs. By expanding access to these tools, the bill seeks to improve maternal health outcomes, particularly in rural and underserved areas where frequent in-person visits may be difficult. This represents a crucial step toward addressing the maternal mortality crisis by ensuring that expectant mothers receive timely, continuous monitoring and support throughout their pregnancies. This is especially critical in rural communities throughout the state, where it is more difficult to receive consistent, accessible prenatal care.

Participating in this advocacy experience was incredibly valuable, as we all brought unique aspects of advocacy, each getting to speak on our own experiences. Still, we demonstrated a shared unified commitment to addressing the pressing issues facing rural healthcare and graduate medical education. Through our involvement, we left with an enriched understanding of how policy and advocacy shape the trajectory of medicine—not just for ourselves as prospective physicians, but for the communities we will serve. The Medical Advocacy Conference affirmed that using our voices to advocate for change is a professional and ethical obligation—especially when it comes to the well-being of our future patients. Our experience does not end with our return to South Dakota; it continues through our ongoing dedication to advocating for unheard voices.

Reflecting on our activism, we discovered that our role as students and future medical professionals extends far beyond the classroom and clinic walls. We have the opportunity—and responsibility—to influence meaningful change at the local, state, and national level. By engaging with the offices of John Thune, Mike Rounds, and Dusty Johnson, we were able to add our perspectives to the national conversation concerning

our healthcare system and deepen our awareness of areas requiring support. Physicians' proximity to healthcare barriers underscores the significance of their perspective in directing meaningful change. Our hope is to inspire medical students and physicians to contribute their opinions and experiences to the ongoing shaping of healthcare. We encourage students to participate in the AMA's annual Medical Student Advocacy Conference to grow as advocates and strengthen the voice of South Dakota.

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