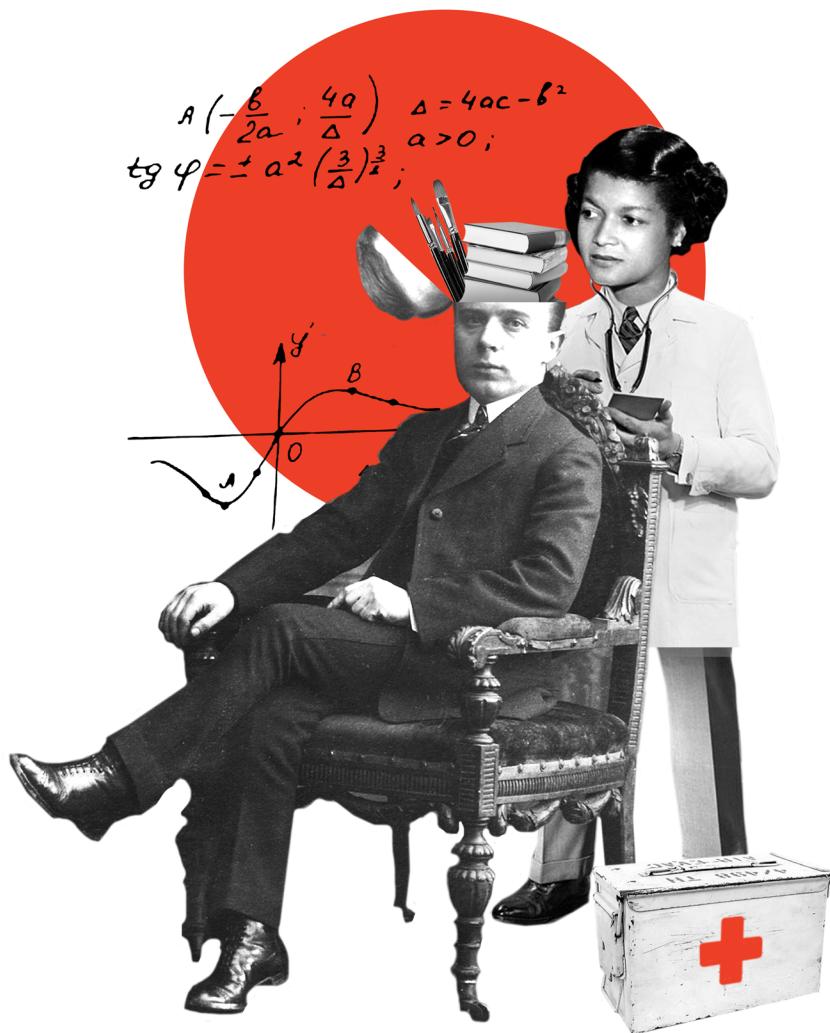


Anastomosis

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Letter from the Editors

As William Osler (1849-1919), renowned Canadian physician, a founder of Johns Hopkins Hospital, and the originator of clinical/bed-side training for medical students, once put it, “He who studies medicine without books sails an uncharted sea, but he who studies medicine without patients does not go to sea at all.” If there has ever been a time in history when the collective whole of medicine has been at risk of indefinitely remaining moored in the harbor, that time is now.

For those of us hoping one day to join the ranks of our country and world’s healthcare providers, we find ourselves entering medicine at a critical moment. The efficacy and range of our interventions are breath-taking. The “mundane” practices of today would have been considered nothing less than miraculous even twenty-five years ago. We enter medicine at a time when our toolbox is more like a toolshed, our medicines more like panaceas than ever before, and our diagnostic capacity verging on the clairvoyant. And yet, the more “advanced” we seem to become, the more patients and their families report feeling as if they were just problems to be solved: kidneys needing dialyzing, tumors being resected, pseudomembranous colons awaiting vancomycin, genes being re-engineered.

Some believe, and we here at Anastomosis are inclined to agree, that the human patient in medicine is slowly being lost. The materialism that has undergirded modern human thinking since the Enlightenment has given us the incredible medical advances we take for granted today, but it has also subtly undermined the notion of the patient as something more than their amassed, material parts. Be you someone for whom the language of souls is meaningful or be you someone for whom talk of emergent properties and the inherent value of the finitude of human life are what carry the day, it is our belief that patients are not just their medical problems—that they are not just broken machines requiring skilled mechanics or talking bags of organs and bones—but that our patients are humans, the chief exemplar of the idea that the whole is greater than the sum of its parts. When we as healthcare providers lose sight of our patient’s inalienable humanity, something is irretrievably lost. We not only make a grave philosophical error in treating people as things, but also jeopardize the healing endeavor as a whole.

As we relaunch the Stanford School of Medicine’s humanities and literary journal, formerly H&P for over ten years and now called Anastomosis, it is our mission to provide a communal platform that cultivates conversations around the human in the concept of patient. We are a magazine of essays, fiction, poetry, satire, interviews, and photography. Guided by our core principles of integrity, intellectual rigor, and the fostering of diverse perspectives, we seek to explore the Stanford Medical Community’s experiences of and reflections upon all that is human in the practice of medicine through the publishing of thoughtful, dynamic, original works. We hope these works will inspire you to reflect, discuss, and write. We’re excited about what comes next and we hope you’ll join us.

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/A•nas•to•mo•sis/

n. A connection between two normally divergent structures. From the Greek *anastomoun*, to provide with a mouth.

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1 You'll Save Lives, They Said

ISABEL BESHAR

The first time I saw a chest x-ray, I was bored.

I like to think my reaction was justified: it was my fifth class of the day, the lights were dim and it was that time in the afternoon when everyone settles nicely into a post-lunch slumber.

A chest x-ray is what some doctors (and test makers) like to call a “key competency.” It’s one of the most basic – and most telling – radiographs we have, diagnosing everything from pneumonia to emphysema. It can also help explain a common complaint among the elderly: shortness of breath.

**

I was nine when I first saw my maternal grandmother, June, trying to catch her breath. We were at the beach in Australia, where the sun and sand come together as one, and everything glistens with light. I remember riding the waves, my back arched in the curvature of the water, my skin dripping with sea and salt.

I saw her sitting there, on a blue and white striped chair on the sidewalk, in her khaki pants and her black shoes. She was holding her coffee, talking to my mother and carefully stroking my sister’s hair.

I saw her chest shuddering. I remember reaching my hands out in front of me, wanting to calm those shoulders, to give her relief. Then all I remember is blue, and the wave crashed down on top of me.

Many miles and years away, I’m in the library when my phone buzzes: *Isabelly, are you there*, the text reads.

I know what’s coming, but I don’t want to face it, and so I move slowly, picking up my notebook, textbooks, and phone. I close the library door behind me, and then I put my computer to sleep, watching the chest x-ray fade into black.

She’s gone, sweetie, I’m so sorry. It was a mass in her lungs.

And all at once, there’s that blue again, and I can feel the waves crashing down my cheeks, dripping from my eyes to my chest to my hands, which are folded, sitting uselessly in my lap.

**

Weeks later, I walk into my new neuroanatomy course, which I’ve been warned is kind of a pain. I’m excited to see my classmates after the holiday break – who knows what would have happened or who could have changed. The class chatters with excitement, the noise bouncing.

The slides begin, and the lecturer moves quickly, describing *neurons* that connect *axons* that form groups of *ganglion* that become *cerebral hemispheres* that make us who we are today. All too soon, I’m back to feeling what is increasingly my new status quo since starting medical school – overwhelmed.

I zone out, drifting back to my white coat ceremony



in the fall. It was then that the dean told us we would learn 15,000 new words by the time we finished school. That our future career was difficult, but also the highest honor.

You'll save lives, was what he said.

**

My paternal grandmother, Christine, was the first person to tell me about Atul Gawande, a physician-writer in Boston whose pen to paper crafted stories I could only dream about.

She loved *Complications*, she loved *Checklist*, but, most of all, she loved *Being Mortal*.

Over lunch, straining to be heard over the sirens and noise that can only be midtown Manhattan, she'd look at me and say: *Don't ever let them make me live through a slow, painful death.*

I'd mumble *yes, Granny*, but then look at her body – the one that, at 87, still traveled the uptown subway and clocked into work every day. That bussed across New England to register young voters, and marched in D.C. following the inauguration of the one man she'd never thought would be her president.

I never told her I hated *Being Mortal*. That when it came to my family, doctors' hands were supposed to stop dying – not succumb to it.

**

The neuroanatomy lecture finishes, and I decide to skip the next one, passing my new friends as I walk up the

four flights of stairs to our break room.

If I had to guess, it was on the 43rd stair when I felt my phone ringing. It's my dad, but I'm confused when I answer the phone.

I've long come to love my dad's voice. It's strong and powerful, and sometimes it reminds me of what I imagine JFK sounded like.

But today, there's only sharp breathing. And then this, in between gasps: *Isabelly, are you sitting down?*

We think it was a stroke, he says. *It happened so fast.*

And all of sudden, it's just me, in the fourth-floor break room, my head bowed, my knees bent, my neurons and axons exploding with the unfairness of it all.

**

I've heard over and over again that losing grandparents is a rite of passage. They lived great lives, people tell me. *You had so many, many years.*

When people tell me this, I nod and give my fakest smile.

But then I turn away, in tears, and shake my doctor hands-in-training, and think: *Why couldn't you have given them more?*

Isabel Besbar writes this memoir in tribute to her two grandmothers, June Jones and Christine Besbar, who passed away during her first quarter of medical school. To be half the woman they were would be the highest honor.



“ ”
**There is something
raw, rich, and
exceptional about
... being invited in
to help.**

6 Curated

NATASHA ABADILLA

“So tell me, why do you want to become a doctor?”

I cringed whenever this question came up during my interviews to medical school two years ago. How could anyone say, with conviction, that medicine is the right path for them before “getting their feet wet?” While the answer I had then was passionate and true, a friend of mine asked me this question recently, and, two years, into medical school, I realized the answer is a simpler one: I crave authenticity.

I experienced how deeply we “curate” our lives and present ourselves as something far different than what we are when I visited Sudan.

Last summer, I conducted a healthcare systems research project in Khartoum, Sudan. I’d lived and worked in Kenya for two years before starting medical school, one of which I spent in Nairobi, Kenya’s capital city. Many parts of Nairobi were quite different from the poverty-stricken, “third world” picture that the Western media often paints, and I thought being in Sudan’s capital city would be similar, but I was so wrong. Among other things, women in Sudan were expected to be covered, in public and around men. While my medical school classmate and I were both in Sudan doing research in the same areas, his experience differed drastically because he was male. He could wear short-sleeved t-shirts and tasteful shorts in the 105-degree weather, while I was expected to wear long-sleeved shirts, ankle-length skirts, and a scarf around my head. He spent long nights sitting by the Nile River

with male colleagues, while my host sisters and I, all of us in our twenties, adhered to a strict curfew. I soon became anxious to feel the sun on my skin and craved any bit of freedom – anything that would make me feel less restricted by this unfamiliar culture.

All of this changed when my host sisters asked if I enjoy Zumba, a dance-exercise cardio activity. I had tried Zumba a few times before and always enjoyed myself, but laughed inwardly at the thought of doing it in a headscarf and long skirt. When the day of my first Sudanese Zumba class arrived and they suggested that I wear “normal exercise clothes that Americans wear” under what had become my everyday garb, my interest was piqued.

After the daily chores were finished and the kitchen was cleaned, my host sisters and their friends walked with me down the road to a shop I had visited a few times. I thought we’d be making a quick stop before taking a public taxi elsewhere, but they led me through a nondescript doorway next to the storefront, and up two flights of stone steps.

As I turned the corner onto the second flight of steps, Rihanna’s “Wild Thoughts,” with its upbeat tempo and saucy lyrics, hit me in square in the chest. I stumbled into a dance studio lined with mirrors, where a few Sudanese women – wearing exercise crop tops and tight yoga pants and spandex shorts – were already warming up. I watched in awe as woman after woman entered the room looking like I did, covered from head



to toe, and undid their scarves and stripped off their layers to reveal trendy, tight-fitting exercise outfits.

Not only did their outward appearances change before my eyes, but when the music – songs straight off the Top 40s chart in the United States – played and the bubbly Zumba teacher started running through dance routines, their demeanor changed as well. Gone were the women who kept their heads down and expressions blank while they moved about. These women held their heads high, puffed their chests out, and smiled brightly as they danced through what I will say was the sexiest, most provocative Zumba dance class I’ve ever attended. I was surprised at the transformation, and I danced along in a daze, thinking all the while that I must have been dreaming.

As soon as the class was over, the women took their places behind screens that served as makeshift dressing rooms and emerged just as covered up as they had been when they arrived. They patted and primped each other before leaving, ensuring that every stray hair was tucked in and every scarf was properly tied. I continued to go to these classes, and I realized that I passed some of these women on my way to hospitals every day. Yet I barely recognized them during the day because of their timid movements and reticent expressions, which were so unlike the confident, bold women I had come to know in the Zumba studio.

These women live extremely curated lives because, as one of my Sudanese male research colleagues explained when I asked him about it, “That is the way we believe women should behave here in Sudan.”

While this sense of secrecy is not as unmistakably evident halfway around the world from my favorite covert Zumba studio, we, too, live curated lives here, and I think that the fact that we sometimes forget to recognize this is a far more suffocating feeling than being wrapped up in a headscarf in 100+ degree weather.

In medical school, what we learn has been curated. For better or worse, we are taught to approach problems in a certain way and only consider a subset of all possible treatments for a given set of ailments. Our country’s news sources have become heavily controlled, the supposed “truth” manipulated so much that we question experts more than we believe them. Who can blame us? Our news is curated, too: murder becomes acceptable if it’s state-sanctioned or approved by world powers, and the court of public opinion often has the potential to hold more clout than scientific fact.

Our government leaders choose to reveal only certain motives behind their political stances, and it’s becoming increasingly evident that the celebrities and artists we admire have skeletons they’ve stashed away as well.

Closer to home, the relationships we have with others – even those we are closest with – are curated. I’ll be the first to admit that I “put up walls” and reveal details about my experiences and thoughts very, very slowly to only a few choice individuals. I once put on a smile and forced myself to exude optimism during a class- and meeting-filled day, and I did it so well that no one could have guessed that I spent an hour the night before sobbing on the phone about feeling overwhelmed while my patient boyfriend listened, waiting for my tears to ebb. It seems it’s more common for those of us who are sensitive and strong to *not* wear our hearts on our sleeves and not be an open book to the people we meet.

From the hobbies we make public to the people we portray ourselves to be, we curate our entire lives for the outside world. Our social media profiles and résumés are the tip of the iceberg. We live in a world in which exposés and leaks are neither novel nor groundbreaking, but expected and ordinary.

We aren’t privy to many others’ real, un-curated lives, but when we are, it’s because we’ve developed a trusting bond with the person. When a patient has a health problem, the door is oftentimes swung wide open, and much trust is put in a doctor to help. Little else unmasks someone’s real character, as ugly or pure as it may be, more than being faced with the scary truth that one’s life here on Earth is impermanent.

There is something raw, rich, and exceptional about

not only being with someone within their own un-curated, cluttered life, but being *invited in* to help. This potential for such a special connection and the capacity to do genuine good is why I am drawn to the medical profession, and why I hope this essay serves as a reminder to myself and to others that we should strive to keep our end of the doctor-patient relationship as authentic as possible, too.

9 Future Speak

ORLY NADELL FARBER

We'll have two dogs. One, a boxer mix with a funny face. A dog for you to train. I'll mock his appearance, love him to death, and envy his loyalty to you. Two, a chocolate lab, sweet and stupid, affectionate to no end. Two so that when we stay too late at work, they'll keep each other company, playing and napping while we take care of people's lives, but neglect our pets. We'll have two dogs and two careers, sending us through clinics, on stages, in front of podiums and projectors, in print. We'll make our way to rural towns, but make our homes in big cities. We'll give injections, test reflexes, hold hands when people die. We'll teach each other facts, argue our way through problems, get desensitized, and then re-sensitized again. We'll respect one another always, but even more so when we fight.

We'll take vacations, too few and far between. When we do travel, we'll spend time on some beach or mountain reading about medicine, talking about medicine, thinking about the work we both secretly miss. We'll fight to stay present, to relax. I hope we succeed. We'll talk as we walk with our arms around each other, supported by the scaffolding of years of conversation, the frameworks we've learned and built together. We'll explore new ideas, new avenues for research. Our world will keep expanding even as our networks shrink.

We'll take care of our families and start one of our own when it's time. Who knows, at this age, what that will look like? Maybe we'll do it all, be the parents we talk about being (only loosely, in unattached future-speak) and become the kinds of physicians we craft much

more openly. Maybe we won't, but we'll always be a team. I feel unstoppable as a part of our whole.

We'll read about war. Watch dystopias on big screens. Deliver both good and bad news. We'll plant basil and remind each other to be kind. We'll never stop acting out conversations between dogs and their owners, using one of five rotating accents. It will always be funny and, even when it's not, it will still make me smile. We'll never stop arguing about communication, always tweaking, redefining the ways we speak to one another. I'll always hear tension in your silence so we'll keep the radio on.

You'll write policy that won't get passed, I'll write an article that won't get published. We'll praise each other's work in earnest, and hope that will suffice. It won't be good enough, but it will be good. We'll buy things we don't need, lose things we do, and let go of things past. We'll feel relief and sorrow and finally learn how to smile in photos.

You'll call me out for being manipulative, I'll call you out for letting your anger get out of hand. We'll call and text and video chat, and do whatever comes next. We'll shrink the distance between us with cross-country flights we can't afford. We'll quietly hope neither of us ever moves on. When it's easy, it will be easy, and when it's hard, it will hurt like hell. There will be points when it's neither easy nor hard nor anything in between. But I will always kiss your shoulder, and you will always stroke my hair, and we will always imagine our future, taking our two dogs on a walk.



10 **Untitled**
LAWRENCE CHIOU

11 Thinking Historically as a Medical Student

JULIE BARZILAY

“The history of medicine is partly the story of how disease entities have become social entities, accumulating the flesh of diagnostic and therapeutic practice, social expectation, and bureaucratic reification [...] This notion is central to how we organize health care delivery, think about ourselves, debate and formulate social policy, and define and manage deviance. Diagnosis is indispensable to linking specific disease concepts with doctor and patient and the social and economic institutions shaping such clinical interactions. Disease is a social entity, not an array of ideal types.”

—Charles Rosenberg, *“The Tyranny of Diagnosis,”* 2002

When I read these words as an undergraduate, I was stunned – and a little bit distressed. The notion that a diagnosis was not a clear-cut conclusion derived from lab values and symptoms, but a moving target, a continually evolving entity that had the power to alter the identity of a patient... It was without question a disconcerting idea. But also an empowering one.

I came to medicine through the humanities, having majored in history of science and completed a masters in History and Philosophy of Science (HPS) in the UK before deciding to become a physician. Historical perspectives have informed all of my experiences since then – through my work as a medical journalist at ABC News, and especially as a medical student. This perspective is not so much a conscious choice as an inevitability – once one starts to think like a historian, it is nearly impossible to shake the mindset. HPS trains students to interrogate where knowledge comes from – how does scientific knowledge emerge and evolve over time? What people, places, and contexts are involved in its construction, and why does that matter?

This fall, I launched a new seminar in history and

philosophy of science at the Stanford Medical School (ANES211SI: Themes in the History and Philosophy of Science and Medicine, funded by the Biomedical Ethics and Medical Humanities Scholarly Concentration and advised by Laurel Braitman.) On Thursdays at lunchtime, a rotating cast of historians and philosophers of science spoke on topics ranging from the history of ethical human subjects research; to illness and metaphor; to the dynamics between video gamers and those who engineer the games. As the weeks went on, I was thrilled to observe a few themes emerge naturally, uniting the disparate talks and tying the lectures (loosely) together.

Rosenberg’s notion of **diagnoses as social entities** was one such theme. For example, Stanford anthropologist Tanya Luhrmann discussed the blurred lines between psychosis and religious fervor, highlighting the way humans construct context-dependent criteria to delineate psychiatric diagnoses. Another week, Stanford historian of medicine Margo Horn chronicled diagnoses attributed to women throughout history: for instance, being a witch, or being hysterical because of a “wandering uterus.” Scientists

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Once one starts to think like a historian, it is nearly impossible to shake the mindset.

today love to speculate about the neurological processes that could explain the “demonic” behavior for which women were burned at the stake a few hundred years ago. Diagnostic categories come and go, and along with them, implications for therapy, associated stigma, and identity.

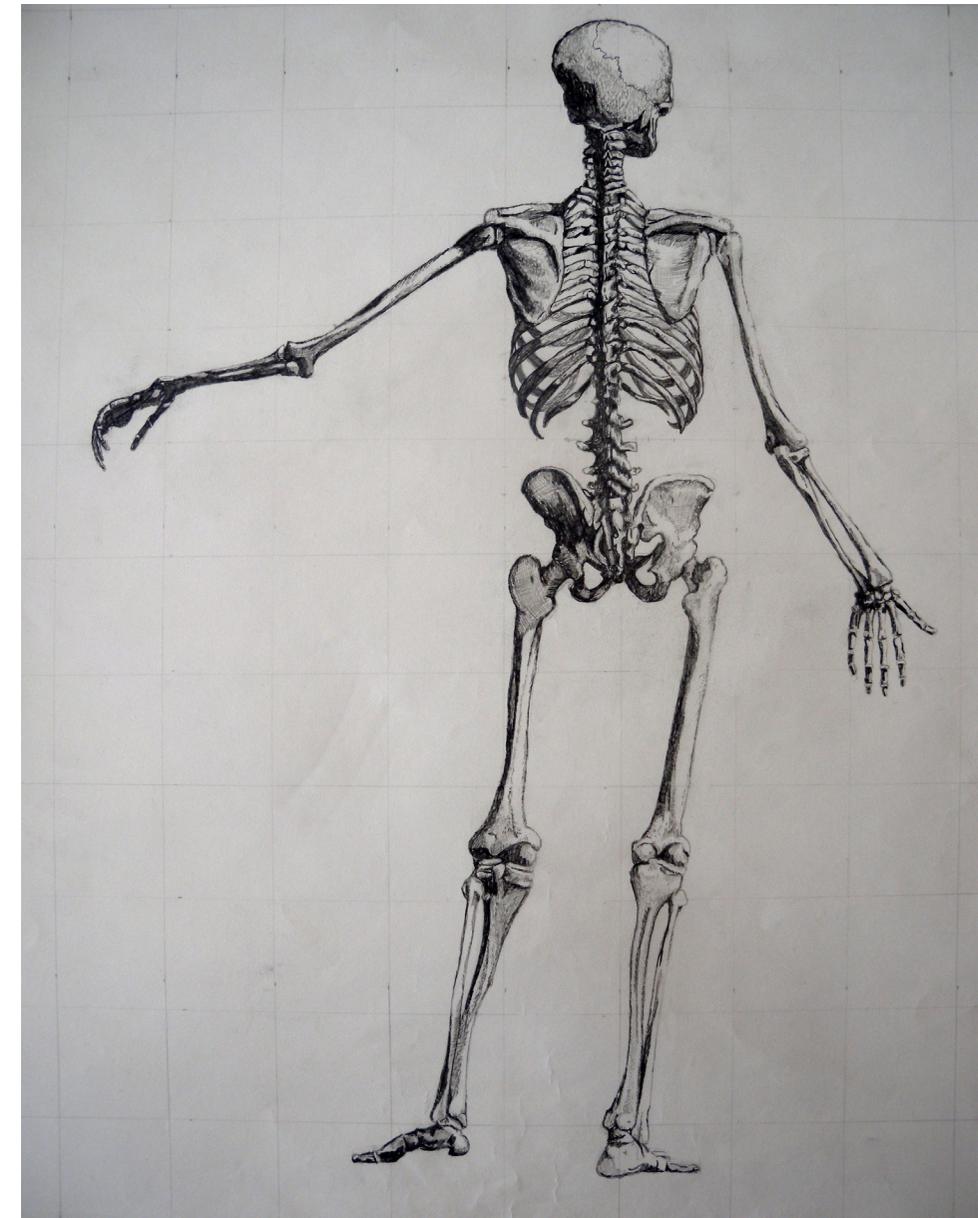
A second emergent theme related to the **role of the “audience”** – be it patients, research participants, or the general public – in the creation of scientific knowledge. Henry Lowood, Curator for the History of Science and Technology Collections and Film & Media Collections in the Stanford University Libraries, told the story of the community of video gamers who helped construct the rules of FIFA online games through their active online engagement. Meanwhile, Sandra Lee, Senior Research Scholar in the Stanford Center for Biomedical Ethics, outlined the way that research subjects – like the family of Henrietta Lacks, and others whose rights were violated by scientists throughout history, contributed to the current laws that govern ethical human subjects research. In science and technology, there is no clear line between those who create and those who consume.

Finally, the broad notion of **social construction of scientific knowledge** arose without fail from class to class. This idea is multifaceted, but the gist is that scientific knowledge is created by human beings in particular social contexts at a particular moment in history. Dr. Sakti Srivastava noted the powerful influence of Big Pharma in dictating what drugs are approved and promoted (for example, opioids as pain pills) or what messages are broadcast about lifestyle and diet in a given era. He also raised thought-provoking questions about what we deem “evidence-based” in this country – particularly when it comes to homeopathic

or “non-traditional” medical interventions. Dr. Robert Jackler, Professor in Otorhinolaryngology and Professor by Courtesy of Neurosurgery and Surgery, showed us a stream of images manufactured by tobacco companies in the mid-1900s, replete with physician spokesmen touting the relative health benefits of Camel over Marlborough cigarettes and promising that certain brands would leave your lungs feeling fresh enough to sing opera or hit a home run (Check out some of the images here: tobacco.stanford.edu/tobacco_main/index.php). Even though the notion of physicians promoting cigarettes strikes modern audiences as ironic and discordant, Jackler pointed out the ways in which e-cigarette manufacturers are utilizing those exact same advertising techniques in 2018.

One of the most unexpected parts of running the HPS lunch seminar was that I regularly found myself reassuring my peers that our speakers were not implying that science was in any sense “useless” just because it was “socially constructed” or constantly evolving. I wanted to make sure that the message of the class wasn’t “don’t believe anything you read in a scientific journal!” That is not the point at all. I love scientific journals, and science, and scientists.

The point is, we are humans, doing science in human settings, and we are part of a long history of evolving ideas. In my mind, being hyper-aware of those contexts can only strengthen the immense meaning, power, and promise of the knowledge that emerges from our labs, clinics, and classrooms. Medicine and science are dynamic fields by nature – and I believe if we’re not asking how we can understand, diagnose, and treat better, how we can think differently – we’re doing something wrong.



14 **Untitled**

KATHRYN VIKTORIA MARTIN

15 Walking with Her

SARA LYNNE WRIGHT

This is about a patient's first impressions - of doctors, of healthcare, and of the most important relationships in her life.

I wrote it during a lot of firsts in my own life: My first quarter of the first Master of Science in Physician Assistant Studies program at Stanford School of Medicine, I enrolled in the first Stanford Health Care Innovations and Experiential Learning Directive (SHIELD) "Walk With Me" course. In that course, Stanford Health Care patients are partnered with MD and physician assistant students; the patients and students develop ongoing relationships to learn from each other's experiences.

You've probably heard the saying "you only get one first impression." But the Stanford Health Care patient with whom I was partnered for the course, Betsy Carpenter, has made me realize that's not completely true: Memory is fallible. A patient might not remember their prior encounter with a provider. A provider likewise might have shoddy (or no) memory of an encounter other than what's written in the patient's chart.

What's more, the memories people retain are often less based in fact than they are in emotion; emotions are fluid, ever-changing. This everyday kind of mental fragility might seem sad, but there's a major upside: For all of us - especially for healthcare workers - every day is a chance for new first impressions.

During one of our meetings at Betsy's senior community, the Sequoias in Portola Valley, I asked her point-blank the central question of the SHIELD course: What has your experience as a patient taught you about how the U.S. healthcare system can be improved?

I knew she'd have a lot to say, and she didn't disappoint. One story she told me in particular made my heart sink. The concise version:

In acute abdominal pain, Betsy showed up at Stanford Hospital's emergency room and waited what felt like eons for a doctor to see her. To her delight, the physician who finally ended up seeing her was one of the Stanford Med School alums whom she'd lectured on advance care directives.

In the exam room, the young provider didn't seem to recognize her former teacher. So Betsy mentioned the shared history between them. The student-turned-physician, who'd benefited from Betsy's teaching, didn't react to the statement at all. It seemed like she hadn't even noticed that her teacher-turned patient had said anything, because she didn't so much as utter a "What was that?" At that point, with a pang of emotional hurt added to her severe physical pain, Betsy didn't have the wherewithal to repeat herself.

Betsy turned out to have a severe intestinal obstruction and had to be transferred three times before finally getting the surgery she needed. But

there was emotional relief through shared experience that could have occurred in that moment. That opportunity was lost forever.

Now, knowing her, knowing everything she's been through, I have a sense of what was lost in that moment. I feel for that E.R. doctor; she missed out on the connection I feel now.

I don't tell this story to cast aspersions; we've all missed out at some point because we're not fully engaged in the present. But it makes me feel even luckier that I had time to spend with Betsy, to let her open up to me about her life, one full of remarkable memories I felt compelled to write down:

Betsy Carpenter was born Betsy Brett in 1930 in New York City. She then grew up in Connecticut, but her dad's work as an air tech in the military during World War II took her family to Ohio. Betsy had something similar to rheumatic fever at the age of nine years old that caused her to be bedridden and frustrated for six weeks. Since then, she has been determinedly resilient in the face of illness.

At sixteen years old, at boarding school at Putney in Vermont, she fell madly in love with Alan Carpenter, and he came back home with her to meet her family at Easter. But after she went back to school, she found out he was back with his old girlfriend Nancy. Brokenhearted, she wrote him off - at least for the time.

She got into Radcliffe College. While completing her general education requirements, Betsy experienced another health hurdle: an unintended pregnancy. After

leaving the state and college for a while to get a legal abortion, she was not allowed to re-enroll at Radcliffe. But she didn't wallow - she enrolled at Cornell.

During the cold winter in Ithaca, she got what she thought was a simple cough and went to see the doctor, who ordered an X ray. She ended up diagnosed with bilateral apical tuberculosis. She had no symptoms so didn't tell her parents and simply laid off physical activity for a while. But when her parents found out about her diagnosis, they sent her, at the age of 20, to a tuberculosis sanitarium.

It turned out to be a blessing in disguise; she met a man named Walter, whom she chose to become even closer to in those close quarters. She had her 21st birthday in the sanitarium, and she and Walter announced their engagement that day. When she was discharged, after roughly a year of inpatient treatment, she was told (based on current statistics) three out of every five tuberculosis patients would be back to the sanitarium within one year. She was instructed not to have kids for at least three years due to risk of recurrence. But she got pregnant "almost immediately" after leaving, and she and Walter had their first child, Su. Walter became a renowned radiologist.

That first marriage was full of love, but it ended in tragedy. Walter left her a young widow when he died of leukemia. Betsy turned to the outdoors to help heal her and ended up working on ski patrol in Truckee, Lake Tahoe, where she saw a lot of injuries and trauma. She vividly remembers a time she heard her daughter screaming on her walkie-talkie and being extremely thankful that it was only a broken leg.

“ ”

**Nature so often
doesn't behave
the way we want.**

Well-acquainted with grief now, she became a grief counselor for the organization KARA.

Betsy's life was rich with friends then, many of whom she says were much younger than she. Always young at heart, she had her own house with a hot tub, and that was enough for her.

But then another curveball hit: Stage 4 breast cancer with 3 positive nodes. She had a right mastectomy done by surgeon Dr. Thomas Hunt, whom she describes as excellent, followed by chemotherapy. By 1981 she was breast cancer free.

She was working the slopes again when a ski friend reconnected her with her old high school flame Alan in 1982. They fell back in love. She chalks the lost time up to Alan being "slow on the uptake." They got married that same year and still live together now.

Alan was there for her when yet another tragedy struck: Her son died at twenty-six years old in a motorcycle accident. She went from being a grief counselor to grieving herself yet again.

Today, Betsy has a lot of loving, supportive family around her: her daughter Su lives in Naples, Italy, and her granddaughter Julia lives in Peru. Alan has four kids, in Seattle, LA, Petaluma and San Jose.

Asked what she values in a physician, Betsy says she wants one who is "right on it." She says her current cardiologist, Mike Fowler, is one of the best in the field. She's learned to value conscientiousness and competency most. She says he has a great sense of humor, which is always helpful but especially during

hard times. She says it's great when someone is a good listener, but Mike doesn't always listen – which is okay because the above other qualities are even more important to her than being a good listener.

Now, despite a repeated heart failure (1995 – first pacemaker for tachy brady syndrome, 2000 - second pacemaker, 2005 - third pacemaker), total hip and shoulder replacements, three abdominal surgeries for intestinal obstructions, and a left ventricular collapse less than a year ago, she typically walks 25 miles a week.

Until she fully retired, she lectured Stanford medical students on the importance of advance care directives with the help of Alan, a well-respected internal medicine doctor who lent legitimacy to her advice. She's a strong advocate for everyone having one.

She values the fact that her path has not been smooth. She believes that broken hearts, illness, disease, and loss – if we get through them - are good for us in the end, because they make us resilient.

I think what I admire most about Betsy is how clear she is about her values. She told me about her thought process when deciding where she and Alan would spend their golden years: If she saw mostly Mercedes and Cadillacs in a retirement home parking lot, she knew the place wasn't for her. She has little interest in living with people who base their value on their pocketbooks.

She and Alan decided to live at Sequoias because of her experience there as a guest speaker. She felt her work lecturing on advance care directives gave her an

accurate perspective on the living facilities she visited. I haven't known her very long, but she gives the strong impression of caring little about image but a lot about substance.

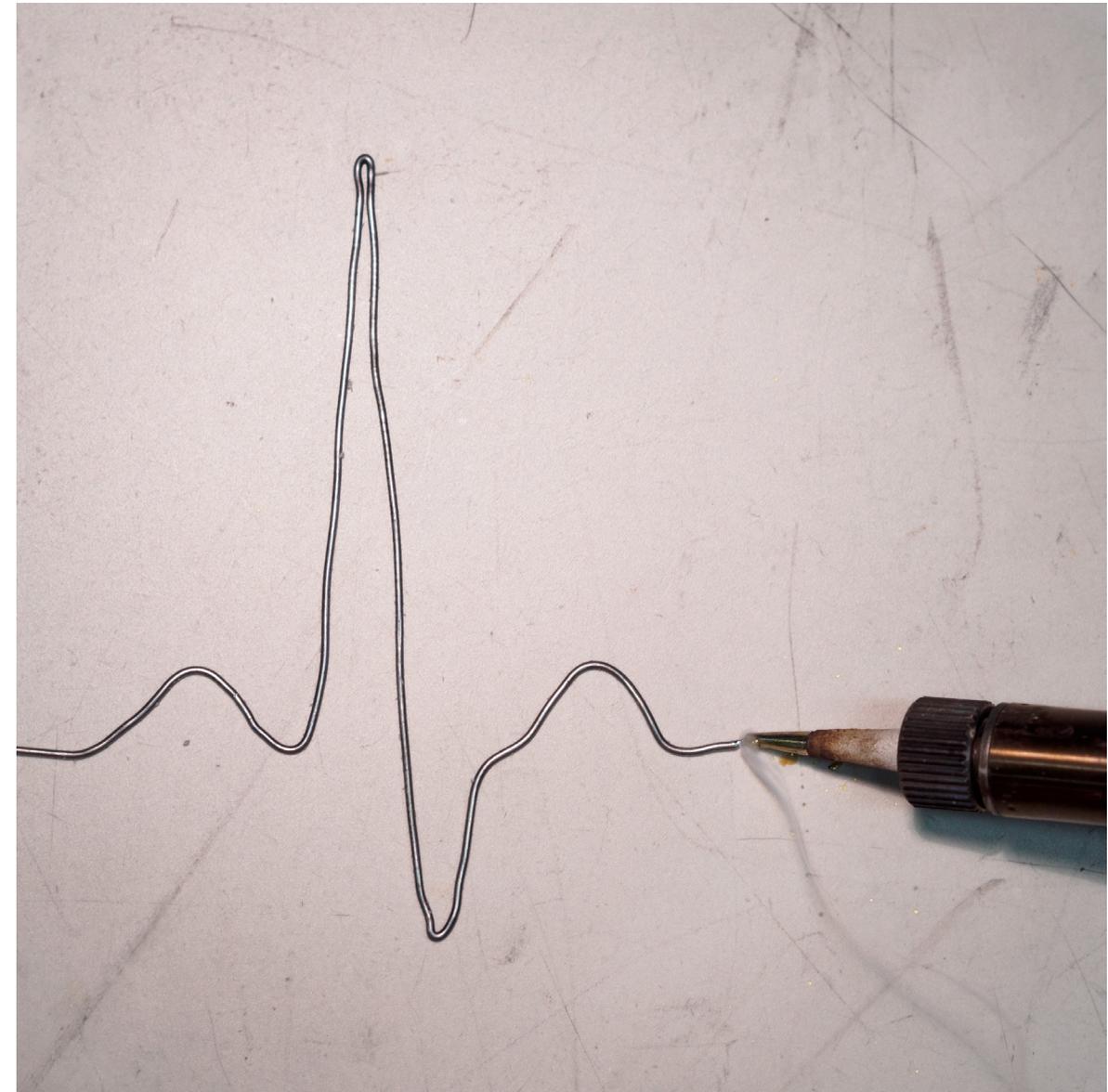
Betsy showed me all the different branches of her home: she lives in one of the independent living buildings, but she showed me the skilled nursing, assisted living, and memory loss areas. She described to me how 56 years ago the plot of land was landscaped from scratch, and how the roots of the redwoods planted actually damaged the foundations of buildings and had to be controlled. Nature so often doesn't behave the way we want.

That truth was demonstrated in a more human sense when we visited a dear friend and neighbor of Betsy's, a former physician, whom Betsy described as close to death. I watched Betsy tenderly stroke the head of the ailing woman, who'd probably soothed many people in her life and now voiced that she found Betsy's cool hands soothing. In labored words, the friend explained she had previously been on an all-liquid diet that didn't actually help with her intestinal problems but appreciatively gestured to the turkey and provolone sandwich in front of her. This former provider seemed calm in the face of her illness though; her tranquility was to be admired, and I wondered if her understanding of her condition helped her accept it.

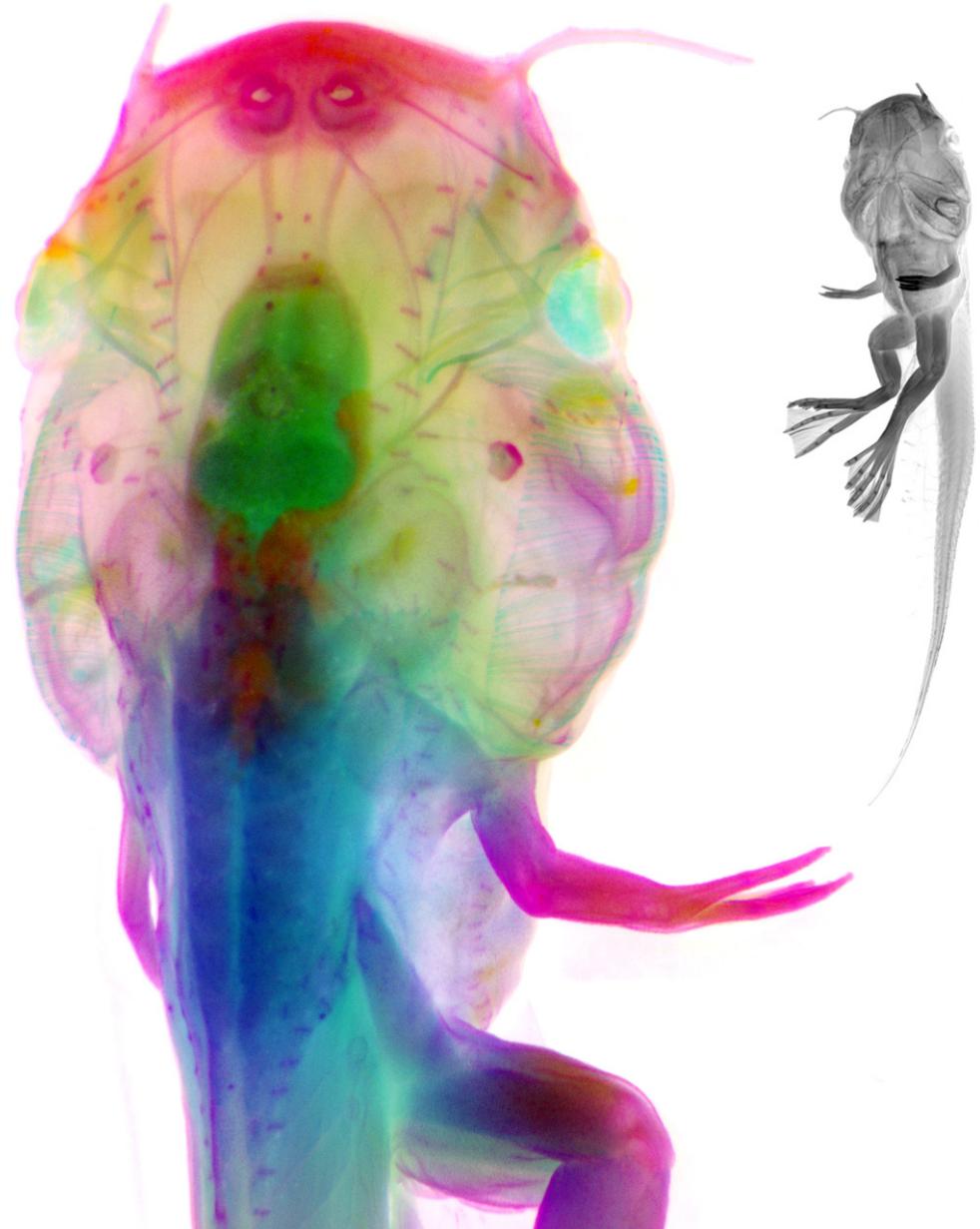
Betsy seemed remarkably at peace with both illness and death herself, describing to me how one man's wife, who used to organize movie nights at the Sequoias, passed away the previous week.. She described to me that, "People die here. It happens."

The statement was matter-of-fact, though I've a feeling she never really gets used to it.

I hope all Betsy's providers from now on take a moment to learn from her. The next time I feel I might be too distracted, exhausted, frustrated or what-have-you to take such a moment with a patient, I hope I take a deep breath and remember her.



20 **Tin Man's Heart(beat)**
SAMMY KATTA



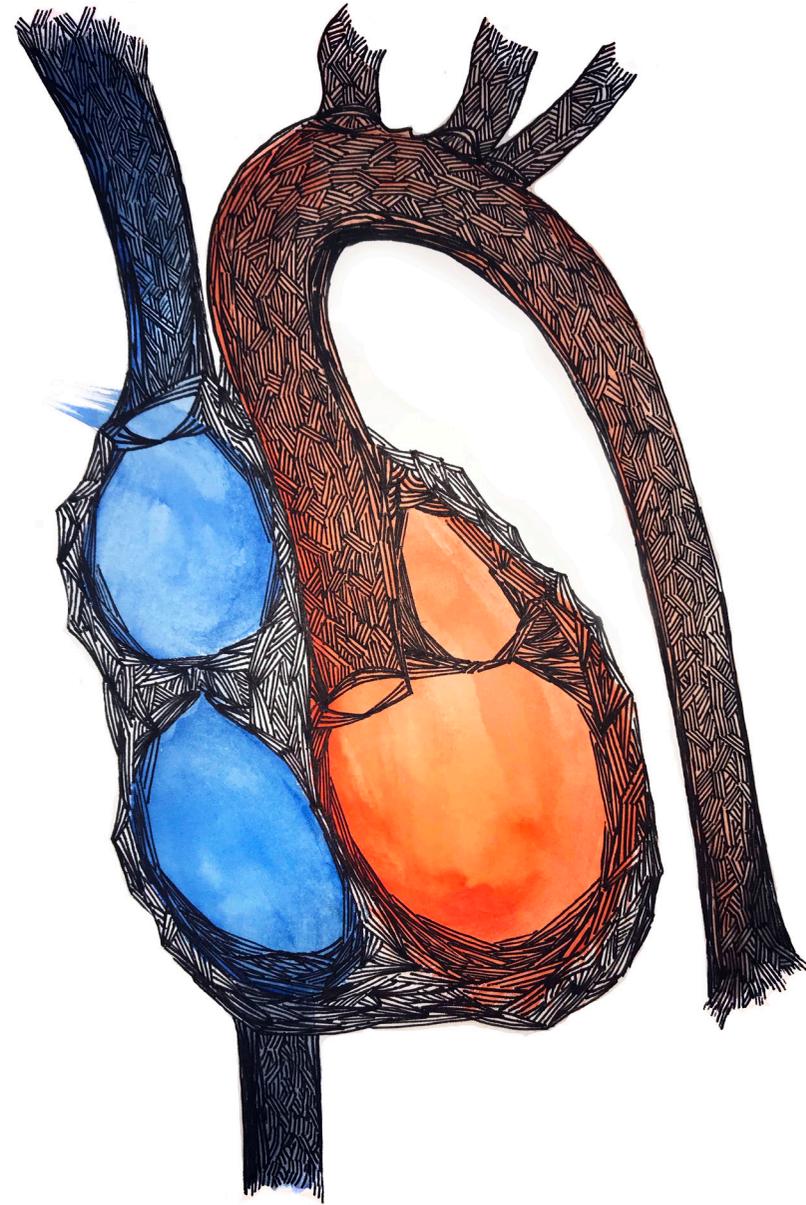
21 Metaphorphosing

NICK LOVE

22 Heartbreaker

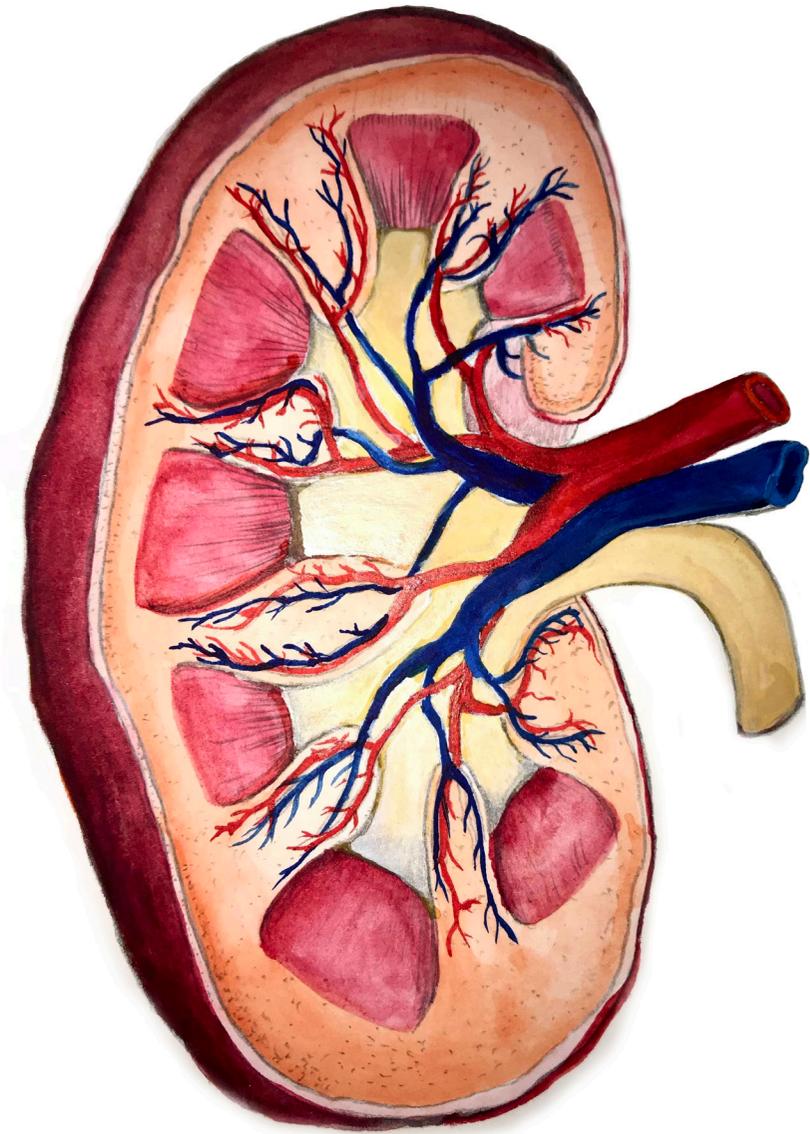
CARLY KING

On the first day of anatomy class
we cut open the cadaver's chest cavity
by making an incision that ran down the sternum
and peeling back the tissue and fat and chest muscles
until there wasn't much left
only bone
that we could easily see through
it splintered under some soft weight and a rotating blade
and there, in the center,
glistening beneath the sterile surgical lamp
the heart sac appeared
wrapped snugly around
the organ it was made to envelop.
It's really called the pericardium, I learned.
and with its parietal and visceral sheets
it cushions the heart
holding it tight in its case.
But the second I saw it
I knew it had extra space.
Pouches and folds, like tiny hiding spots
because hurt has to be stored somewhere
and right next to the organ generating blood and love and pure good
is probably the right place.



23 Heart

JOHN CANNON



24 Kidney

JOHN CANNON

25 Unabraded

JECCA STEINBERG

The pedals disappear beneath my tattered violet sneakers
on my bike ride into the sunrise of the hospital.

Her sandpaper voice held the first words of the day.

Our fingers intertwined for a moment before
my stethoscope navigated her bare chest.

Laughter lived in her ribs.

As I traced the unknown, she winced, her eyelids flickering,
a city in her abdomen.

Such determination and vulnerability,
she reminded me of my mother.

I offered her my warmth.

In her desert for nine days,
I gave her more thoughts than I spared for myself.

Our interactions,
dehydrated roots tapping obscured springs.

I stumbled and tripped after her as if she were Miriam,
as if her hands could lead us.

Her pedagogy, a simoom, sculpting an ascent

I previously scaled only in thought,
reshaping an anticipated landscape
with unfamiliar earth to render dunes,
too steep for my knees.

Each day, she pleaded for water,
unaware that I could not serve her thirst.

Where her lips met,
dried terracotta skin, stretched and broke open, parched.

Each night when I too begged, but for answers,
for a diagnosis,
my mouth filled with sand.

My fingers carve ravines through my hair after my helmet unclips.

Hips disintegrating as they press the lock around my bike,
their full rotation propels me down the hospital hall.

When I enter the room,

a daughter asks me to close her stiffened jaw, to help her look at peace.

A ventifact of her erudition, I cannot move.

I still cannot find the traces of myself that remained
to accompany the dust by her hospital bed.

27 Prognosis

DILLON STULL

Please comfort me, Doctor—perhaps you might know:
Will the solitude last? Will it come and then go?
When it stiffens my veins, will its fingers feel cold?

When the shadow-breeze takes up its post at my gate,
If my naked soul rises to shout, I'm afraid
That this throat-tube will choke any word I might say.

Should I pray now for courage, or mercy, or rest?
Is my spirit an eaglet, and this life, the nest?
Whereto flows the oil from death's olive press?

Doc, I fear, and I beg you to help me allay
The terror that buries my peace in dismay.
Can I walk toward a goal if I know not the way?

(Doctor):

*My feet have not stood where the hidden is plain;
There is darkness so dark that the eye must be trained;
There is brightness too bright for the heart to contain.*

*But I have seen the rose thorn in raiment of red;
That livelier stories are told of the dead;
Forgiving another is heavenly bread.*

(Patient):

My bed, as the dirt nourished freshly by showers,
Conceals me in silence to bud in this hour;
At the bidding of death, I will open and flower.

28 Coping with Allergies

NEIL E. ROBBINS II (www.neilercomics.com)







TANYA LUHRMANN

Tanya Marie Luhrmann is the Watkins University Professor in the Stanford Anthropology Department. Her work focuses on the edge of experience: on voices, visions, the world of the supernatural, and the world of psychosis.

32 Interview with Tanya Luhrmann

KATHERINE LYMAN

Katherine Lyman: *To get started, can you talk a little bit about the kind of work that you do?*

Tanya Luhrmann: I'm interested in the way invisible "others" become real to people—both the way people experience God and the way people experience the voices of psychosis. At *Anastomosis*, you are probably more interested in the side of the work concerning psychosis. In that work, I try to understand the general social conditions that increase the risk of developing psychosis, the social conditions that contribute to the outcome of psychosis, and the social conditions that shape the experience of psychosis, particularly the experience of hearing auditory voices. When people struggle with psychosis, they have many auditory and quasi-auditory events, often quite frequently. We talk about this as "hearing voices." One of the things I see as a scholar is that the culture shapes the content of those experiences. This suggests that those experiences are respond to learning, which supports certain kinds of interventions.

KL: *Do you feel like the research you've done has some application points that could be helpful for psychiatrists or for medical practitioners?*

TL: I think the work that I do suggests that there are differences in the content of voices in different cultural domains. In some of the work that I have done, Americans, on average, report more caustic experiences, more violent experiences, and less

positive experiences than do subjects in Accra, Cape Coast, and Chennai. It's hard to imagine how those differences could be explained by the bodily features of the disorder. That work suggests that the voice-hearing responds to learning. That observation is at the center of the new, more marginal, even radical approaches to treating distressing voice-hearing within the clinic. In these new approaches, people learn to treat the voice almost as a person. And this is what I see subjects in Accra, Cape Coast, and Chennai doing. We know that at least the course and the trajectory and outcome of psychosis in India is somewhat more benign than in the United States. It is possible that the more benign voice-hearing contributes to the more benign outcome, and this suggests that these newer approaches which invite people to treat the voices as persons might work. These new approaches—and I'm thinking of the Hearing Voices movement, and avatar therapy—work a little differently, but they share some common features. The Hearing Voices groups will invite participants to treat the voice as a person. You name the voice. And then you are taught to respect the voice. And the idea is that if you respect the voice, the voice will respect you. You're going to experience the voice as a person, and you're going to treat the voice properly. And so the voice will respond as a proper person would. And people learn, in these groups, to negotiate with the voice, to say, "Okay, I will do something you want me to do if you leave me alone for a certain period of time." The research seems to suggest that these interventions might be helpful. In avatar therapy, clients choose a

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I'm interested in the way invisible "others" become real to people.

computer avatar that represents their most distressing voice and a voice timbre that represents the timbre of their most distressing voice. The therapist makes the computer-generated voice say what the client says that their voice says. Then the therapist teaches the client to negotiate with the voice. You treat the voice respectfully, you're not yelling at the voice, you're not hysterical. You politely, graciously, and responsibly treat the voice like a reasonable human being. The therapist makes the computer-generated voice respond in kind. Again, the research suggests that this can be helpful for people.

KL: Is this intervention being widely implemented in the US so far?

TL: No, avatar therapy is pretty new. The first pilot data, to my knowledge, was published relatively recently. The Hearing Voices movement is much older. Hearing Voices has been around for maybe three decades at this point. It's more accepted in Europe, in particular in the UK, than it is in the United States. I think this is in part because of the psychiatric experience of treating schizophrenia in this country. In the 1960s and 1970s, psychoanalysis was the dominant idiom for treating schizophrenia within psychiatry. Psychoanalysis, of course, looks for emotional conflict generated by social situations, and the dominant and terrible idea was that the mother was responsible for driving the child mad. The best example came out of this excellent, disturbing paper from Gregory Bateson and others. He described what he called the "double bind." The "double bind" was created by a mother who gave conflicting messages of love and rejection to her child. The famous example was this: the mother comes on to the

unit, her son reaches out for a hug, she flinches, he withdraws, and then she says, "Don't you love me?" The argument was that the son had become mad to avoid recognizing that his mother was really rejecting him. And it's not that there is no insight from that understanding. It's not that there are no double binds. There are plenty of double binds in the world. But the effect of that formulation was that parents who lost their child to madness had to struggle with the idea that they had driven their child mad. When biomedical psychiatry emerged and rejected the schizophrenogenic mother, it also rejected the social causation of schizophrenia and rejected the idea that there were any social causes that would drive people mad.

KL: Does the Hearing Voices movement propose a specific hypothesis about how or why those voices were learned?

TL: Many people in the Hearing Voices movement think that the voices are a response to sexual trauma. And people will sometimes say that each voice carries the memory of a particular sexual trauma. I think that that is a very risky formulation. It is clear that the experience of sexual trauma and other kinds of trauma increases the risk for psychosis. Yet we are also aware, in this country, of the overreach of the idea of sexual traumas—in particular the memory wars, the repressed memory movement, the controversy over Satanic ritual abuse. Framing a condition like schizophrenia only as a response to sexual trauma can encourage people to identify trauma where it may not have been present. The Hearing Voices movement is a pretty diverse movement. There are a lot of different perspectives, and not all people are committed to the idea that voice hearing is a response to trauma.

But in any event I don't think you need to accept that part of the formulation to use the method. It's understandable that clinicians and psychiatric researchers are skeptical. But it's also clear that someone who is born poor or lives poor, their risk of developing schizophrenia increases. There is indeed social causation in schizophrenia. And so in that sense, the schizophrenogenic mother is back, except it is the society which is schizophrenogenic.

KL: *Do you have thoughts about the world of psychiatric diagnosis in general? Or distinguishing illnesses from each other? Is our current system a good one?*

TL: Clinicians' use of the system is more sophisticated than the system as written suggests. Yet in a condition like schizophrenia, the science seems to suggest that the closer we look, the less we're confident in the sharp bright line dividing schizophrenia and other conditions. It's hard to do away with diagnosis, because diagnoses provide such clear categories. It would probably be a clinical nightmare to have a series of dimensions on which to rank people. But it's certainly true that the categories as we know them have a complex relationship with the experiences of the people on the ground. Many researchers who work on and around the categories are often frustrated by the starkness with which they present these conditions.

KL: *What specifically is frustrating there?*

TL: Take schizophrenia: there's nothing in the experience of voice-hearing that's unique to psychiatric distress. People who do not report distress can sometimes report voices talking to each other,

whispering or murmuring, commanding. The kinds of events that have traditionally been taken as specific for, almost pathognomonic for, schizophrenia...it's clear that they're not. You talk to people, and some people seem to have something like a psychotic process, even though they're not ill. So I think there's pretty widespread agreement that the basic definition of the diagnosis of schizophrenia is a little wonky. The time period that defines the illness is sort of arbitrary...you need to show signs of the disorder and some signs of distress for 6 months. On the other hand, it's helpful to have a disease category for it. And so many people who work in the domain of psychiatry have that same sense that it's helpful to have categories even though nobody quite knows if they believe the categories.

KL: *Here at Stanford we talk about moving psychiatry into an even more precise biomedical system where we might in the future do imaging or genetic tests to find out exactly what disorder someone has and why they have it. What do you think of this model and how does it change people's experiences of mental illness?*

TL: The biomedical model is, from the client's point of view, a boon when it helps reduce the burden of the illness. With depression, for example, a lot of people return to baseline after a bout of depression. Medications help that to happen. And so to have a model of the illness that says this is due to factors that may be out of your control, that this may have as much to do with your body as anything else, and that if you take this pharmaceutical agent, it will reduce your symptoms—that can be a tremendous advantage. It can make people feel less guilty, so they don't need to blame anyone, including themselves, for

falling sick. It's much less helpful if the illness doesn't remit. If someone has an experience of depression, and the depression never seems to go away, and their sense is that the cause of their depression is in their body and they can't do anything to change that, then that could be devastating. In my experience it's often devastating for people who meet criteria for schizophrenia. The biomedical model suggests that people with schizophrenia have a broken brain. I saw that the clients that I was spending time with often felt that a diagnosis like schizophrenia was a diagnosis of death, especially in a society where thinking and our minds are so central to who we are. To say that your thinking is permanently disordered and that it's part of your body and that it's never going to get fixed...that's like condemning you to a broken life. And so that is the cost of the biomedical model. I think it's sometimes hard, on the outside, to realize, particularly for schizophrenia, how devastating the sense of loss is for people who meet criteria for the disorder and how terrifying it can be.

KL: *Do you think psychiatry could benefit from looking at past methods, like psychodynamic therapy?*

TL: Absolutely. As far as I know, most care is improved by offering that kind of empathic intervention. And of course you can argue that psychiatrists can provide the medications and everyone else will do the psychotherapy, but I think the evidence is pretty good that the quality of the personhood of the clinician, the way in which clinicians reach the client, how they pay attention, how they're concerned with the personhood of the client, whether they empathize and can convey that empathy...the evidence is pretty clear that that's an

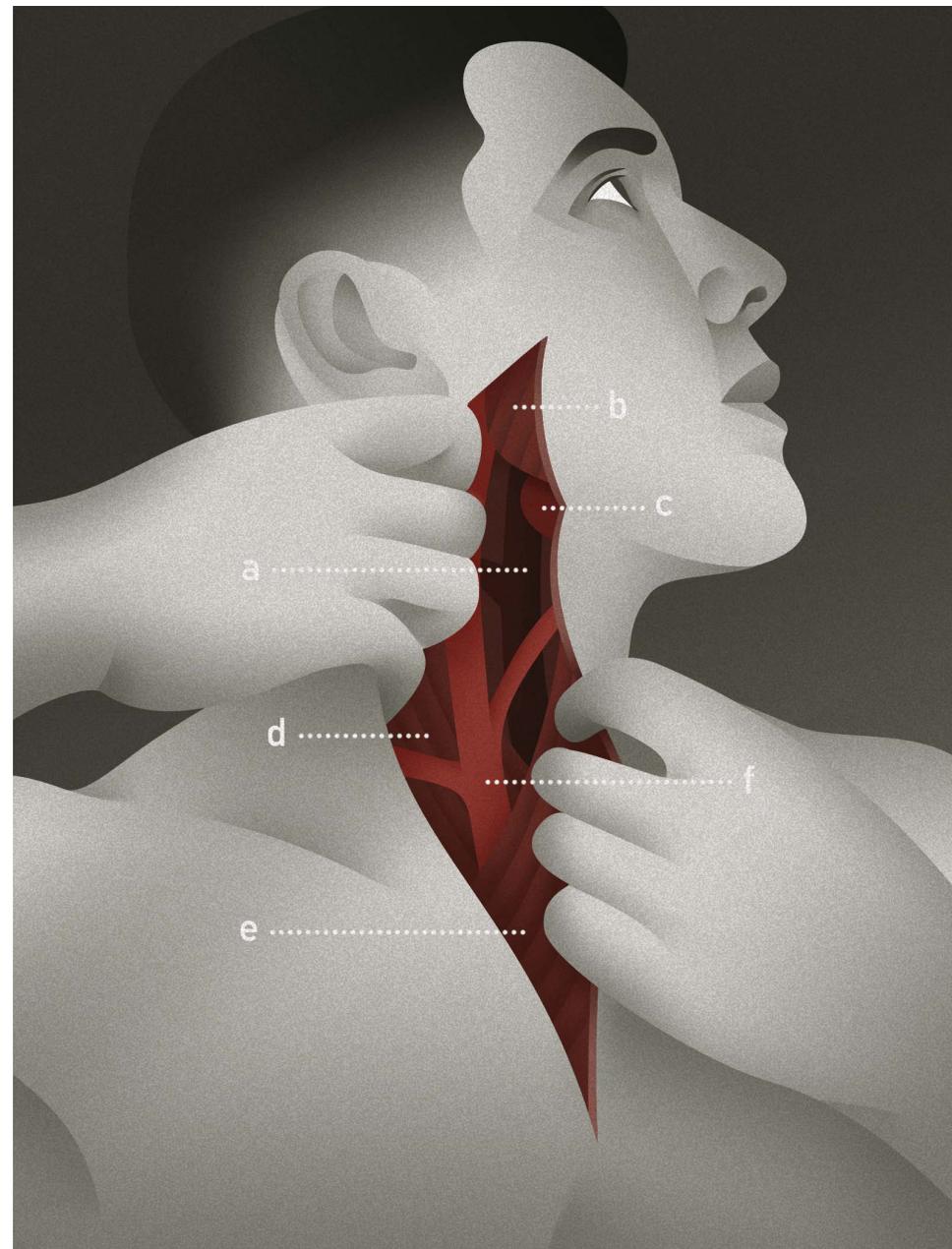
important part of the process. It's a loss to the client if a psychiatrist doesn't have that training. I would even say it's a loss to psychiatry, because unless the psychiatrist wants to enter biomedical research, it makes psychiatry so much more of a satisfying enterprise to sit with the full person to talk about their experiences.

KL: *Do you think there any assumptions in the delivery of psychiatric care that are generally harmful?*

TL: Psychiatrists, for the most part, see people who need care. That's who they are. So when a psychiatrist encounters someone who crosses their threshold, the psychiatrist is often looking for the problem that brought them there. And that's understandable. That's the clinician's job. Yet particularly in psychiatry, people cross the threshold in more complicated ways. A secular profession like psychiatry may often be quick to diagnose religious experience as having pathological causes. There are many papers diagnosing Joan of Arc as struggling with schizophrenia. She clearly heard voices, but it doesn't seem to have done her any damage.

KL: *Anything else you want to share for medical students to hear?*

TL: I think keeping open an interest in the humanities and social sciences improves medicine. It improves the capacity to listen, and so I'm encouraged by the interest that I see across the line that sometimes separates the medical school from the rest of campus.



37 **Inside**

RYAN BREWSTER

