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Cover photo provided by Don Parsa, M.D.

Definition of "mauli" provided by Pukui, M. K., & Elbert, S. H. (1971). Hawaiian dictionary: Hawaiian-English, English-Hawaiian. Honolulu: University of Hawaii Press.

Significance of Native Hawaiian healing plants used in journal design:









POPOLO

'OHI'A LEHUA

"Elements of nature such as water, air, and earth as well as Hawaiian healing plants were incorporated into the campus design. Specifically, JABSOM chose four healing plants to be a part of its official logo: kukui, popolo, 'awa, and 'ohi'a lehua. Kukui symbolizes enlightenment and specific parts were used medicinally to treat sores, childhood ailments and rebuild strength after an illness. Popolo is known to be foundational in Hawaiian medicine with specific parts used to treat respiratory ailments, skin eruptions, eye infections, and sore throats. 'Awa serves an important role in ceremonies with specific parts, usually the root, chewed and or mixed with liquids. Medically 'awa was used for the treatment of insomnia, muscle strains, kidney disorders, and headaches. 'Ohi'a Lehua symbolizes regeneration as it is one of the first plants to appear after lava consumes and cleanses an area. Medically, 'ohi'a lehua flowers were combined with other medicinal plants to alleviate childbirth pains."

Werner, K. K., Lee, W. K., & Kamaka, M. (2018). Medical School Hotline: Mala La'au Lapa'au - John A. Burn School of Medicine's Hawaiian Healing Garden. Hawai'i journal of medicine & public health: a journal of Asia Pacific Medicine & Public Health, 77(5), 118–120.

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## mauli (mă'u-li)

- 1. n., Life, heart, seat of life; ghost, spirit
- 2. *n.*, Fontanel. (space between the bones of the skull in an infant or fetus where ossification is not complete and the sutures have not fully formed)

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Horizon Ryan Yanagihara, M.D. Untitled Anonymous PhotoVoice with Healers & Leaders. Concept & Exemplars from Puni Ke Ola. Kanoelani Davis, Miliopuna Davis, Yheslie Valete, Mahealani Bright Wilhelm, Jackie Ng-Osorio, Dr.PH., & Susana Helm, Ph.D. Thank you, 2020: A year-long lesson in empathy for a lifetime of greater joy Winona Kaalouahi Lee, M.D. Keeping Ourselves Safe So We Can Keep You Safe Jennifer Manyu Wong

The Hills, The Peaks, and The

# **EDITORS' MESSAGE**

Mauli is the art and literary journal at the University of Hawai'i John A. Burns School of Medicine (JABSOM). The purpose of this journal is to feature creative works by members of the greater JABSOM community, and in doing so, acknowledge the significance of the arts and humanities in medical education and practice. The idea for Mauli was first sparked by a hospital stay: a week before Vera Ong (MS1) had her first final, she experienced sharp abdominal pain and was kept under observation in the hospital for a few days. She channeled her stress and anxiety into writing about her experience, helping her find peace and positivity within her situation.

Throughout our academic or professional lives, the artists, writers, and creators in us are often overlooked. It is our hope that this journal can help to keep those parts of us alive and well by advocating for self-reflection and mental health.

In naming this journal, we wanted to capture and honor our purpose and sense of place. To this end, we sought the wisdom and expertise of Dr. Mālia Purdy.† When she presented us with the name, she shared that "Mauli is defined as life, heart, and seat of life; ghost and spirit. It is also the word for fontanel, or the space between the bones of the skull in an infant or fetus, where ossification is not complete and the sutures not fully formed." With this, she commented, "Acquiring knowledge through education is limited if not connected to the human spirit." The name *Mauli* speaks to both the abstract and scientific aspects of growth and life—both of which are important to address in medical education in order to develop effective physicians who serve the communities across Hawai'i. We are honored to have this name bestowed to us by Dr. Mālia Purdy.

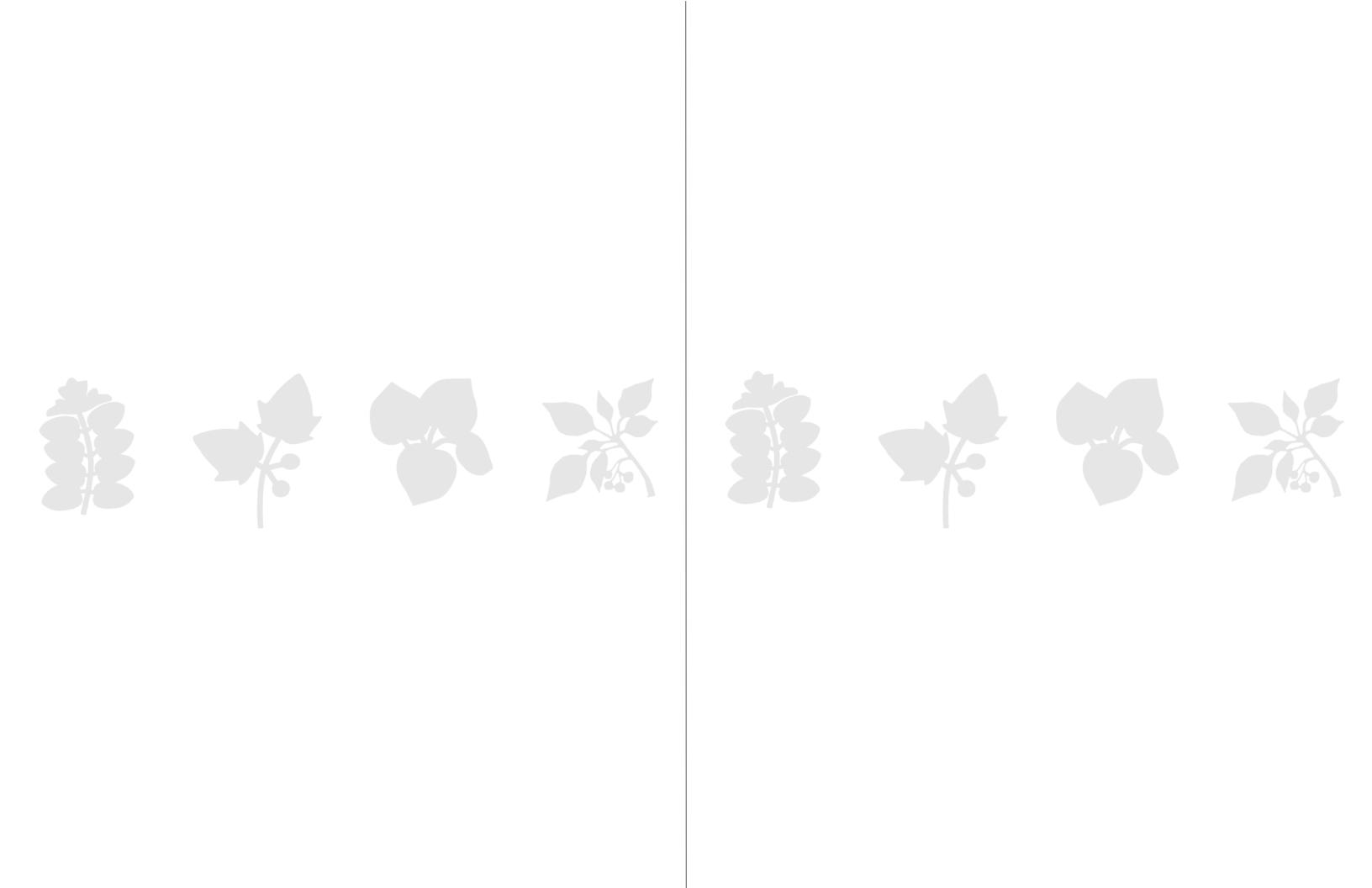
† Dr. Purdy is an Assistant Professor in the Medical Education division of the Department of Native Hawaiian Health. Being raised on the neighbor island of Maui, she is passionate about growing our own doctors and other healthcare professionals. She is passionate about fostering, mentoring, and supporting local students along their educational journey, and being able to shape, influence, and share perspectives to the future healthcare professionals of Hawai'i is a kuleana she deeply honors.

# **ACKNOWLEDGEMENTS**

We would like to extend a sincere mahalo to Dr. Shannon Hirose-Wong in helping to turn this vision into a reality. From conception to completion, her guidance and enthusiasm have been instrumental to the success of the journal. We would also like to thank Dr. Mālia Purdy for her very thoughtful contribution to our name and identity (see Editors' Note, p. iii).

The journal would also not have come to fruition without the generosity and efforts of Dr. Lee Buenconsejo-Lum, Dr. Martina Kamaka, and the JABSOM Communications Team (Vina Cristobal, Deborah Dimaya, Paula Bender)—thank you to you all.

Finally, thank you to those who submitted art and writing to the first issue of *Mauli*—you all gave voices to stories that might otherwise have gone untold.





# **Better Half**

Anonymous

"Hello, how are you?" Simple yet charismatic. Had me, at hello.



**Untitled** Saya Orite



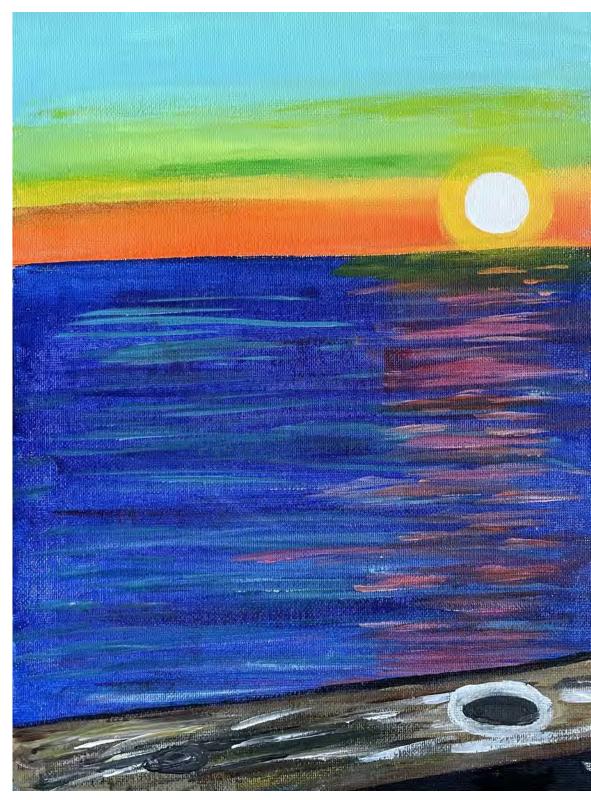


# **Grass Volleyball**

Richard Ho

Receive, set, and spike.
Ahh, the sun warming my skin.
Here comes the serve, catch!

Richard is a MS1 at JABSOM. In his spare time, he loves to do his Anki cards and read First Aid for fun before bed. During his day job, he watches videos and cooks.



**Untitled**Ruixue Rae Zhang

# **Catching Waves**

## Paula Bender

Paddling my surfboard into the lineup, I assess the lineup of game faces, and take my place. I search for familiarity: Eyebrows that twitch Wassup?

I take my place a little to the left, a bobbing spectator. You don't paddle out and catch the first wave you see.

You wait. You watch.

You watch the faces in the lineup as

They look out to sea and

Read the waves that line up on the horizon.

You watch the lineup as each surfer lines up to be

Just inside the curl as it crests and begins to break

Right or left.

Finally I get my turn and

I paddle like hell.

Feeling the wave rise beneath me I

Come to my feet,

Turning to stay high on the wave I'm

Riding along its edge until its

Face builds beside me.

I tuck in and under the curl, and

For a few soundless seconds time stands still.

Sea spray dances along the tube's top,

As it spits me out into the air

And off its face.

I paddle back out

Into the lineup,

Trying to hide the shit-eating grin

That's on my face.

A proud Jersey Gal who grew up across the Delaware from Philly, Paula has called Hawai'i home for 40 years. She meditates on the Zen Rider, her road bike, is the owner of Aloha Instant Pot Community in Hawai'i on Facebook, and prefers cats. She has been working in JABSOM Communications in the Dean's office, for more than a year now and has written for local and national publications.



**Strange New World** Cecily Wang, M.D.

Cecily Wang, M.D. is an acute care surgeon with Hawaii Pacific Health and intensivist with Aloha Critical Care Associates. She was born in Taipei, Taiwan and immigrated to the US with her family when she was 8 years old. Dr. Wang has extensive medical training in general surgery and trauma critical care medicine. She has served both domestically and internationally as a member of the US HHS Trauma Critical Care Team and Doctors Without Borders. Dr. Wang believes in the positive impact that a small group of caring individuals can make. In addition to medical relief work, she enjoys traveling and creating art.

And Cancer.

# An Ode to a Lymph Node

Paula Bender

Refer to page 5 for author's biography.

A living map beneath my skin,
Red arteries flowing away, blue veins toward
The heart, command central,
Pulsing between my lungs,
Refreshing, reinvigorating blood cells.
There are backroads as well,
That are no less significant.
They sweep and they catch
Pathogens, fats and delinquents.
My gratitude to my lymphatic system,
Courier of lymph fluid, pathogens, white cells.

A melanoma took root behind my right knee
Just a bump that I felt before I could see.
Punched out, the biopsy was declared malignant.
I went from Stage 1 to Stage 3 in less than a minute.
Scans for my brain, spine, bones and body,
Gave no indication there were others at the party.
But then a beautiful turquoise dye was sent searching,
Disclosing the pathway that this cancer might have gone lurking.
The dye found its way to my nodes to the north,
A chain of fatty pearls just doing their work.

One lit up, a tell-tale sign,

Gorgeous and blue, this lymph node of mine.

This was the sentinel with a job to do,

It held captive that cancer without further ado.

Microscopic melanoma was enclosed in the node,

Which served as gatekeeper in protector mode.

It had taken the cancer and kept it enclosed,

It kept me from being even more exposed.

People ask me how I found that first melanoma.

I had noticed it for months. But I was going to Kona.

I was busy training for my race: Swim, bike, run.

I didn't want a little skin spot to spoil my fun.

Days after my race to dermatology I went,

I tore off my clothes and put on a paper tent.

A lighted magnifying glass examined every inch of skin,

While we talked about my decades in the surf and the swim.

I turned around and it was easy to spot,

Soon it was punched out and into a cup it was dropped.

My tale might have meandered.

But my message you see,

Is that maps not only send us to where we must be,

They also can show us what it is that we need.



**Poison Tree**Cecily Wang, M.D.

Refer to page 6 for artist's biography.

# **Generational Shift**

## Paula Bender

I count her fingers, I count her toes,
I smell her cheeks, I kiss her nose.
My heart swelled when we first met.
Becoming a mother took away my breath.
As my daughter grows and becomes her own person,
I must deny the urge to provide diversion.
For I wish to stall her growing independence,
Because I am desperately clinging to being a parent.
It isn't fair to hold a child back from life.
It isn't fair to prevent them from experiencing strife.
But is it fair that a mother's love should be so frail?
That motherhood subsides and the need for her pales?
My hope is that when she is out on her own,
Our bond forges deeper, our love has grown.



**Mother & Daughter** Saya Orite

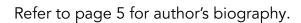
Refer to page 5 for author's biography.

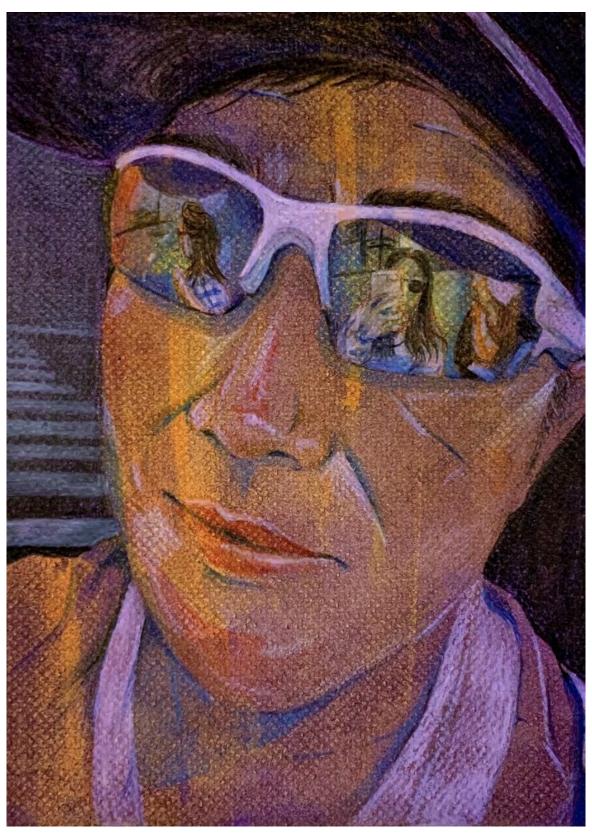
# Philly Cheesesteak

# Paula Bender

Ever since I left South Jersey In the late '70s, My craving for a decent Philly cheesesteak Has gone unsated. Toasty hoagie roll, Transparently thinly sliced ribeye, Piled high with fried onions and peppers. Wit? Widout? To which one would say Whiz or (Of course) provolone. Your mouth really can't go home again. The memories of my little 12-year-old hands Holding a hoagie roll overflowing with Philly cheesesteak has never been repeated By the so many try hards and copy cats And food trucks and popups that I've deigned to try. Sometimes, you just have to recreate that Memory and Share the love and Create a longing within someone Besides yourself. #EatAtMoms

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**Reflection** Saya Orite

# The Cat's Job

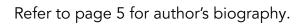
## Paula Bender

While several of our neighbors have dogs,
You must consider this and give pause,
That the pets in the 'hood
That do the most good,
are the kitties with sharp killer claws.
If there were a problem with rats or mice,
Those dogs wouldn't even think twice.
But a fine family cat, a self-respecting one at that —
Would consider such occupation a vice.



Kitty Girl, the last of three Bender kitty siblings, aka, Chief of Security.

Our kitty isn't the only one who thinks it fun, To bring home the prey with which it wants to play. I've heard my neighbor scream when she looked out her screen, To see body parts in glorious disarray. For it is sport to a cat to bring home big game. To show up with a critter nearly dead and surely lame. Once kitty's announced a victim she's pounced, She tosses it up in the air with a jump And watches it sail like a doomed lump. We know what to do. We thank with profuse, As she finally takes her first munch. We leave kitty to enjoy her well-earned prize, Knowing full well That she's saving us The spleen For our lunch.



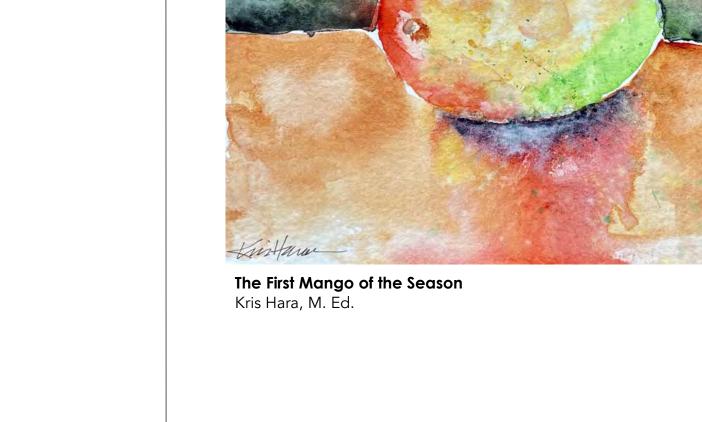


Four Cats One Moon Cecily Wang, M.D.

Refer to page 6 for artist's biography.

# **Hale** Makoa Mau

Eating a good meal Spicy ahi poke, yum Bringing my heart home



Kris Hara, M. Ed. grew up on the North Shore of Oahu. On the mauna, one of her earliest memories was of drawing a calamansi shrub, surrounded by giant Hayden and sour cherry trees. Acrylic and watercolor are her favorite mediums and any surface is fair game for mark making. Now with more time after completing her graduate degree, she enjoys distance running and expanding her visual dialog to inform the canvas. For her, bringing life, memory, and creativity together provides solace, joy and a kind of strength that cannot be accessed otherwise. Knowing that everyone has a unique creative spark, Kris also loves to encourage others to create, and has taught craft and fibre arts, and watercolor and mixed media for various groups.

Makoa Mau is a first year medical student at the University of Hawai'i, John A. Burns School of Medicine and a proud graduate of Kamehameha Schools, Kapālama.

# The Raft of Medusa

Don Parsa, M.D.

It is fun and educational to walk through art galleries of museums where great paintings are on exhibit. The Louvre museum in Paris is one such place where the "Raft of Medusa" is on permanent exhibit. This masterpiece as seen on this page is by the 19th-century French artist Theodore Gericault (1791-1824) and has become an icon of Romanticism. It depicts an event of great social and political scope in the history of France. The painting tells the story of the wreck of the French frigate "Medusa" off the coast of Senegal (East Africa) in 1816, with over 150 souls on board. A poorly constructed raft drifted away on a bloody 13-day odyssey including cannibalism that was to save only 10 lives. The painter researched the event in detail and interviewed the survivors. He also did anatomic studies of cadavers and made numerous sketches before deciding on his definitive composition. The primary cause of this tragic wreck was the captain's inexperience and arrogance.

The tragedy began when the "Medusa" became stuck in a sandbar that the captain could have easily avoided had he heeded to the advice of experienced sailors on board who did their best to dissuade him in taking this tragic path. Improper measures were taken in constructing a small raft and overcrowding it with 150 people. The raft was abandoned to the waves and drifted aimlessly in the tropical waters. To make matters worse, the captain cut the cord that was attached in tow to the lifeboat so that he and his affluent friends could reach the coast of Africa safer and faster. The occupants of the raft spent a miserable existence with basically no water or food and by the time they reached the African coast their number of 150 had been reduced to 10. All historians agree that the wreck was a direct result of the captain's arrogance, lack of experience, and poor judgement. Had the captain shown humility rather than arrogance by heeding good advice this incident would not have happened.

My painting on the next page illustrates a team of surgeons during an operation. I have attempted to show the value of team work where the individual's "selfish barriers" are removed and the team becomes a unified body that is closely bound together. In such a situation, the primary surgeon (the captain of the ship) becomes part of this closely knit group whose sole mission is to do what is best and safest for the patient. The primary surgeon, his assistant, the student, the anesthesiologist, and the scrub nurse become unified thus leaving no room for arrogance and selfish conduct that adversely affects the outcome of the operation.

Don Parsa M.D. is the chief of the Division of Plastic Surgery at JABSOM and the founder of JABSOM Osler Society. He has received many teaching awards both from medical students and surgical residents. Painting is his hobby.



**Untitled**Don Parsa, M.D.



**Conception**Cecily Wang, M.D.



**Demons Matter** Cecily Wang, M.D.

Refer to page 6 for artist's biography.

#### Art & Literary Journal at JABSOM

# My Biggest Fear 06/30/20

# Brianna-Marie Hollister

She tells herself not to get attached. That soon enough, time will come to change everything she knows. The sights outside the windows, the noises on the street, the smells of cooking that waft out of the neighbors' apartments. The people she spends her days with will change, and she thinks it is, perhaps, no use to even bother making friends.

She resists it. The chatter at breakfast, commentary on the news. In the background: the sounds of the toaster slowly burning English muffins, a fried egg sizzling sunny-side up and salted on a pan. Company at the TV, while she lies on the carpet relaxing and digesting. The care—Did you finish your food? How did it taste? Did you brush your hair? Is the bathroom clean enough? Did you sleep well? Worst of all, the obvious fondness. Soft kisses on the top of the head. Tiptoeing past as they misinterpret her resting with her eyes closed. Unquestionable attention to what gifts she likes and the types of things she doesn't care for.

Don't get attached. It's her mantra, slowly losing strength as days, weeks, months pass without change.

She follows them around the house. Observes what they do with their lives. How they watch screens and tap buttons hour after hour. How they work sharp objects into foods that smell good and foods that smell bad, moving them from receptacle to receptacle until a steaming bowl of something enticing is placed on the table and soon devoured. She is witness to tears, to darkness, to coughs and sneezes and blood. She knows they like to roll around in the sheets in the mornings, laughter bubbling out of a door opened just a crack. She's accepted that they're huggers, but she's not there yet, and they're okay with that.

With the passing of seasons comes new freedom, and after months of cold and snow she is allotted more time outdoors. She loves the spring: the smell of earth, the revival of trees, the vibrance of flowers, the chirping of birds. She watches bluebirds flit from bush to bush until they grow bored of the yard and fly away. She rips up blades of grass and tracks dirt inside. She peeks into windows she's not supposed to, until she is caught and called away. Then she just sits, enjoys the wind blowing softly through her hair, squinting in the sun as it bathes her in warmth.

They call her their child. Their little stinky baby. A source of pride and joy. A friend.

One day, a familiar yet unexplored spot on the couch looks cozy enough for sampling. She falls asleep there, curled against a quiet, warm body that is overtly engrossed in a book while covertly celebrating a victory.

Don't get attached.

Almost all at once the heat of summer becomes too much to bear. She still explores the outdoors but finds her stamina depleted. Midseason, she notices the shelves beginning to clear. Dusty bags are brought out of closets she's only looked in once or twice. Drawers are emptied and clothes laid out, folded, then placed elsewhere. Books are donated and gifted away, furniture sold, the fridge cleaned out but not cleared. Some of it stays, but much of it leaves. Sketchbooks, figurines, skeins of yarn. Half the soap, half the shoes, half the sheets.

Each day over the course of three weeks is marked by new disappearances of pieces of someone else's life—pieces that she had come to recognize as her own, shared.

They say things at her, but she doesn't understand. They say things about her—she knows because she knows what they call her—but she doesn't understand what. She hears the urgency, feels it, too. She receives a goodnight kiss almost daily, in the hour after dinner when she's sleepiest, stretched out on a high perch by the window. It's soft, barely there.

Don't.

One morning, before the sun comes up, before she expects them awake, an alarm chimes and they rise. They eat, solemn and stressed, and an hour later they leave with all the bags that have been filled and zipped and weighed and locked. She sees the vehicle they enter, watches the lights drift away down the dark street.

Two leave, one returns.

This has happened before, she thinks. She's already been through this, and it never lasts for long. A few hours, most times. A few days, seldom.

But this time feels different. The man who came back is quiet. She senses the emptiness of the apartment, how the spare sounds have acquired an echo. She tries to continue her routine. On her perch by the window, she watches the wind shake the leaves in the trees, imagines it ruffling her fur as she sits in the cool dirt under the hedges. The hours pass. The sun comes and goes. She eats. She sleeps.

When she wakes, she notes that breakfast is distinctly changed. It doesn't start on time. It doesn't have the right characters. It's not noisy enough, not crowded enough. Not whole. The voice of a newscaster plays through a phone and makes a feeble attempt to fill in the space.

It happens again the next day.

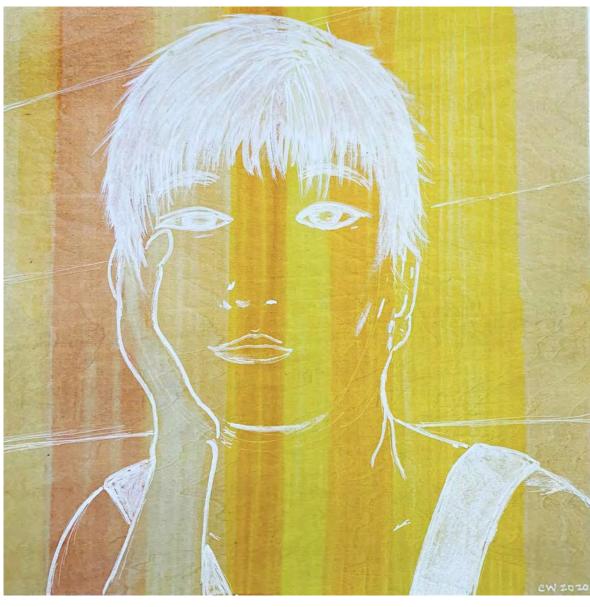
And the next.

And the next.

Weeks pass, months pass, seasons pass. Time rolls slowly over and and continues on even as she realizes she has been longer without than with the woman who never returned. She thinks she may have been loved, once, but with each day her conviction grows that whatever that feeling was must have been insignificant if it could not make her stay. She wonders if she did something wrong. She thinks herself right in her reluctance to become attached, but she had failed to adhere to her rule. She misses what she thought she had laid claim to, something she lost and does not know how to retrieve. Feels its absence like falling off a high place and botching the landing.

This day, too, her meows at the door do not summon the girl back home. After dinner she retires to her perch, where the man can stay in her sights as he watches TV. The cat lays her head on her paws and peers out the window until her heavy eyelids draw her into sleep.

Brianna Hollister is a first year medical student at JABSOM. She was born and raised on O'ahu and spent the last 6 years in Boston, MA.



I C U. Do you see me? Cecily Wang, M.D.

# My First Clinical Experience as a Medical Student

Vera Ong

What started off as weird pain in my right lower abdomen and a simple "appendicitis" Google search turned into an admission to the Queen's Hospital. As an out-of-state student, I never would have guessed my first real-life clinical experience would have me as the patient.

After going through the emergency department and testing negative for COVID-19, I got hooked up to an IV pole and was put into a hospital gown. No one ever warned me of how such a thin piece of fabric had the strength to leave one so helpless. I was wheeled into a shared room and my roommate seemed to be fast asleep. After settling, I shut my eyes and tried to rest amidst the incessant beeping of monitors near my bed.

Throughout the next three days and nights, I met hospitalists and members from the surgery team and was told that I needed to be kept for observation. I woke up every morning to needle pricks and struggled with lugging my IV pole to the restroom. Despite my inopportune condition, I still tried to go to my Zoom classes and kept up with studying. I had less than a week before my first final.

As the time progressed, word somehow spread that I was the "medical student patient." Maybe it was from the fact that I always pestered my nurses and doctors with questions. Maybe it was from the way my eyes lit up when they administered IV ciprofloxacin and metronidazole—antibiotics covered in my upcoming final exam. Maybe it was the *First Aid for the USMLE Step 1* book plopped on the corner of my bed. Whatever the reason was, some doctors used my situation as a teaching opportunity to go through my CT scan and the differential diagnoses of my condition. Ironically, my classmates and I recently had diverticulitis as a practice clinical case so I was already armed with some knowledge. However, my shining moments were quickly humbled by my blank stares as my doctors journeyed farther into medical terms still foreign to my young medical mind.

As I was studying the pathophysiology of myocardial infarctions, my roommate peered through her curtain and made her way to the restroom. I noticed her eyes grimace with each step. My desire to assist her was constrained by my own pain and inability to get out of bed. Despite her discomfort, she smiled at me and continued on. It was clear she was in a more severe state, yet she still remained positive. She introduced herself as "Mrs. T."

Mrs. T mentioned how she missed going to work and seeing her family. She shared how she was recuperating from a renal cell carcinoma extraction and how COVID-19 added more stress to her decisions. Restrained to our hospital beds and separated by a thin curtain, we kept talking and encouraging each other. We shared stories, jokes, and prayers, doing what we could to stay positive. Considering our inability to see our friends and family, we served those roles for each other. We ended up getting discharged on the same day, and Mrs. T thanked me for listening to her and wished me well on my exams. She told me that I have the makings of a great doctor because of my ability to set aside my own agenda to check in on her. Her words were more than enough to help me push through my final exams.

After taking my tests, I wrote about my experiences, reflecting on my physical and mental well-being. Just like Mrs. T, I had an innate desire to put my thoughts into words. I wrote about what I learned both medically and emotionally. Previously, my endless "to do" lists—and my stubborn inflexibility—rarely gave me this luxury. This pushed me to start a student-led humanities journal within JABSOM called *Mauli*. Given the isolation that comes with quarantining and social distancing, I hoped to give students, faculty, and alumni the platform to express themselves through their art and words, encouraging them to carve out time to reflect and share their stories. By partnering with JABSOM faculty and fellow students, I hoped to emphasize that true physician-patient connection can only be achieved if we first allow ourselves to be vulnerable and honest with our own thoughts and emotions.

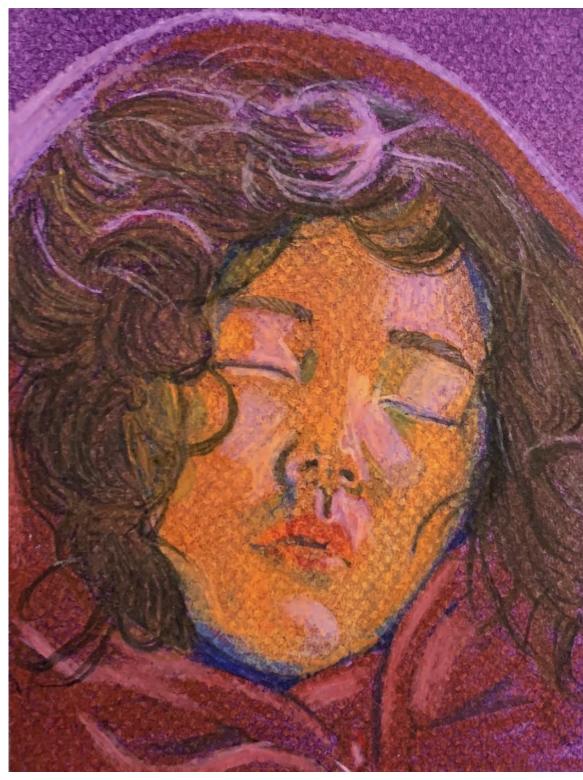
What started off as a terrible experience developed into something positive. JABSOM now has a student-led humanities journal that aims to cultivate an environment and tradition that focuses on the physical and mental well-being for others and oneself.

Thank you, Mrs. T.

Vera Ong was born in the Philippines and raised in California. She is a first year medical student at JABSOM who recently graduated from UCLA with a BS in Psychobiology. In her free time, she enjoys playing the guitar, singing, volleyball, and writing.



**Pineapple Saya** Saya Orite



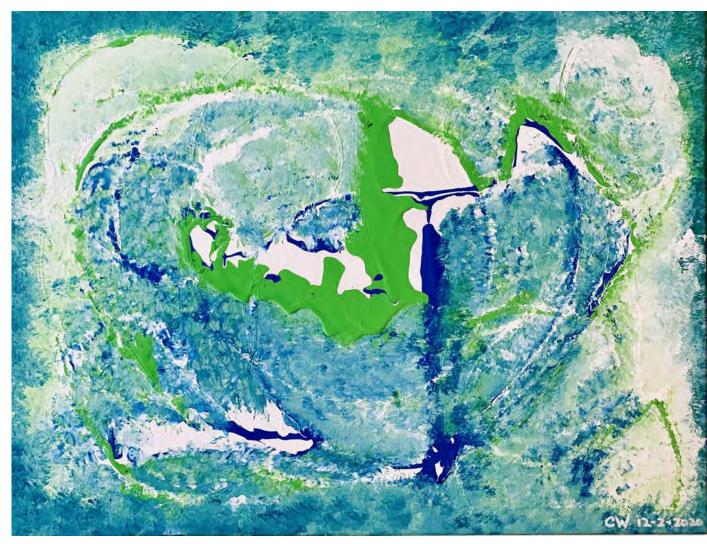
**Untitled**Saya Orite



RIP RBG 9-18-2020 Cecily Wang, M.D.



**Unnamed**Cecily Wang, M.D.



Ocean from Erik's Yard Cecily Wang, M.D.



Mary with Child Cecily Wang, M.D.

# The Creative Mind in Medicine

Richard Szuster, M.D.

Whether our role in medicine is practitioner, teacher, researcher, or administrator we will experience uncertainty; times when the sum of our knowledge and experience does not provide answers. In these moments we need inspiration - we are tasked with being creative - with producing the new and the useful.<sup>1</sup>

Yet medicine's relationship to creativity is an uneasy one.<sup>2</sup> The current epistemological foundation of medicine is unimodal and relies upon rational empiricism - an emphasis on phenomena that are measurable, quantitative and apprehended in a rational, analytical manner. Creativity is a more complex process. It is bimodal. The creative process includes rationality but also integrates non-rational elements such as imagination, inspiration, and intuition - phenomena that typically are not highly valued in medicine.

Medicine's relationship to creativity can be understood from a developmental and historical perspective. Sixteenth century Renaissance physicians such as Paracelsus placed imagination in a central role. According to Paracelsus all manifest phenomena - including those specific to medicine and healing - were understood as flowing from an act of creative imagination - an act that allowed trans-rational, celestial influences to impact the material world. But foundational shifts occurred in medicine as western culture transitioned into the Enlightenment of the 17th and 18th centuries. Enlightenment thinkers were suspicious of any phenomena that could not be subjected to logic, reason and rational analysis. Non-rational phenomena such as the imagination were categorized a priori as irrational and imagination was rendered a groundless and illusory force. From the Enlightenment perspective the imagination became equated with the imaginary – the untrue, unreal, and fanciful.

The countertrend to this diminishment of the imagination was represented by the emergence of Romanticism in the late 18th to mid-19th centuries. For the Romantics, the non-rational force of the imagination surpassed conscious reason's ability to fully apprehend the depth of human experience. Ultimately, the tension between rationality and non-rationality contributed to a bifurcation between the arts and the sciences. In the sciences rational analysis and empirical proofs dominated, while in the arts non-rational phenomenon such as imagination and inspiration continued to be highly regarded and valued.

Western medicine developed in synchrony with these broader cultural trends and foundationally aligned itself with the sciences, adopting a unimodal focus on rational empiricism – an approach that endures to the present. This approach has value. It provides a rigorous analytical methodology that guards against unsupported conceptualizations of disease processes and treatment strategies. But the singular emphasis on rationality limits engagement with the more complex creative process, which also includes non-rational processes.

The example of Otto Loewi serves to illustrate the creative process as it manifests in a medical scientist. Loewi discovered that communication between nerve cells was chemically mediated. This important discovery laid the foundation for modern psychopharmacology, and in 1936, Loewi was awarded the Nobel Prize in medicine. The inspiration that guided Loewi's Nobel experiment came in a dream:

The night before Easter Sunday of that year I awoke, turned on the light, and jotted down a few notes on a tiny slip of paper. Then I fell asleep again. It occurred to me at six o'clock in the morning that during the night I had written down something most important, but I was unable to decipher the scrawl. The next night at three o'clock, the idea returned. It was the design of an experiment to determine whether or not the hypothesis of chemical transmission that I had uttered seventeen years ago was correct. I got up immediately, went to the laboratory, and performed a simple experiment on a frog heart according to the nocturnal design.<sup>3</sup>

Otto Loewi's experience is consistent with Graham Wallas'<sup>4</sup> classic four stage model of the creative process. In Wallas' model rational and non-rational modes of experience interact through four major stages: In the *preparation* stage, conscious rational efforts are applied to acquire knowledge and formulate ideas. As Loewi indicates, he deliberated over his theory for seventeen years prior to his inspired dreams. In the *incubation* stage, non-rational, unconscious processes are operative and support the development of inspiration. The process of incubation has significant empirical support,<sup>5</sup> and the phenomenon of unconscious work – an associative process occurring outside of conscious awareness - has the best evidence as an explanatory mechanism.<sup>6</sup> Then, in the *illumination* stage creative ideas spontaneously emerge into consciousness, as with Loewi's inspired dreams. Lastly, in the *verification* stage, rational processes are engaged to empirically validate the products of the illumination stage. For Loewi, years of experimentation and empirical validation were undertaken prior to his Nobel award.

Emerging discoveries in the neurosciences provide support for Wallas' model. Kounios and Beeman<sup>7</sup> have identified electroencephalographic (EEG) and anatomical features that distinguish the interactive rational and non-rational modes in the creative process. Unconscious/non-rational activity in the incubation stage includes spreading cortical activation that allows for divergence of thought and the formation of non-obvious associations. This is a process whereby disorganized information becomes more and more organized until it reaches an equilibrium and is transferred to conscious awareness and rational processing.<sup>8</sup> At the moment of insight, when the transfer of information to conscious awareness occurs, increased right temporal gamma brain wave activity has been identified.<sup>9</sup>

When creative inspiration emerges for the medical scientist it is usually followed by a prolonged period of rational consideration and empirical verification. But in the realm of clinical medicine the situation is different. When creative inspiration emerges for the clinician there is most often a greater immediacy and a more constricted time frame. In the rapid flow of clinical medicine there is an understandable concern that engaging non-rational modes of cognition might regressively loosen our grounding in our evidence-based foundations. This concern has validity. In a conventional mind the neural networks responsible for conscious rational thought are in an anti-correlated relationship to the networks responsible for unconscious non-rational thought. That is, when one of these modes is activated, the activity of the other is typically suppressed. So, when a conventional mind engages non-rational elements such as intuition and imagination, it has less access to rational thought processes. Practicing medicine with an attenuated capacity for rationality is not wise, skillful, or safe. This has naturally led to advocacy for interventions designed to increase rational, analytical capacities as safeguards against the error proneness of non-analytical cognition. While this

advocacy is sound from a conventional standpoint, it does not take into account the more complex capacity of the creative mind. It formulates a duality between rational/analytic cognition and non-rational/inspired cognition - between science and art. From a conventional standpoint this duality is useful because it protects against unconscious bias and error. But when considering creativity a broader perspective is needed. In the realm of creativity, the disunity between rationality and non-rationality cannot be resolved by suppression of either or by elevating the value of one over the other. Rather, the creative process benefits from both rational and non-rational inputs and the creative mind is the result of a dialectic that supports an integration of both.

The work of the philosopher Jean Gebser<sup>12</sup> helps to conceptualize this dialectic from a developmental perspective. Gebser has provided cultural and historical evidence for the evolution of western consciousness through discrete developmental stages. From Gebser's perspective, mental-rational consciousness is currently the most prevalent method of apprehending the world. It is a perspective reliant on the capacity for analytical thinking – the ability to apply sequential logic and linear causality – it is *rational*. As noted previously, the emergence of this capacity is evident in the shift to Enlightenment thinking in the 17<sup>th</sup> and 18<sup>th</sup> centuries. Gebser also observed that while the mental-rational structure affords considerable benefits – such as the rational empirical approach that is the foundation of modern medicine – it also can become deficient. For instance, when the open inquiry of science constricts into scientism - the fundamentalist belief that rational and empirical knowledge is the only valid form of knowledge.

Gebser's perspective on non-rationality is instructive. In his model, the structures of consciousness that developmentally precede the mental-rational structure are conceptualized as being *pre-rational* – they do not yet possess the capacity for rational cognition. Phenomena important in the creative process such as dreams, intuition, and imagination are in this category. But rather than rendering these phenomena irrelevant, Gebser proposed that their integration is fundamental to the new and emerging consciousness structure that he labeled *integral*. The integral structure is also a non-rational structure but it is clearly distinct from pre-rational structures because it includes the capacity for rational cognition. As such, the integral structure maintains the benefits of rationality, while seeing through the exclusivity of the rational perspective. In his analysis Gebser provided extensive examples of the emergence of this structure, as it is manifesting across diverse fields of human endeavor.

As it relates to creativity, Gebser's integrative phenomenological perspective is in accord with emerging evidence from the neurosciences. For example, the neuroscientists Roger Beatty and Rex Jung<sup>13</sup> have studied creative cognition, with an emphasis on understanding the neural mechanisms underlying creativity in general and artistic improvisation in particular. Their work has focused on the relationships between the brain's default mode network and the brain's executive control network – two large-scale neural networks. The default mode is a network of mid-line and inferior parietal brain sites that are active when the brain is engaged in non-rational processes such as mind wandering, imagining, and dreaming. In contrast, the executive control network, which includes the dorsolateral pre-frontal cortex as a core hub, is engaged during tasks requiring externally directed attention, and supports rational processes such as executive functions, cognitive control and conscious decision making. As previously described these two networks have been considered to have an anti-correlated relationship – engagement with one suppresses activity

in the other.<sup>10</sup> However, Beatty and Jung present evidence of coordinated activity between these two networks in creative activities – providing neuroscientific support for the notion that integration of rational and non-rational processes is important in creative processes.

Focused inquiry into non-rational cognition in medicine is rare, but there has been some nascent interest. For instance, Oliva, et al<sup>14</sup> studied the impact of *gut feelings* in the diagnostic process in general practitioners – intuitive sensibilities that provide information in a non-rational manner. The group of physicians they studied reported using intuitive feelings commonly and effectively in their day-to-day work with patients. The authors further suggested that the ability to integrate non-analytical processes into clinical decision-making – along with rational, analytical, evidence-based practice – is characteristic of advanced learning.

In considering the potential contributions of creativity to the practice of medicine, Paul Haidet<sup>15</sup> utilized the analogy of jazz improvisation. Jazz improvisation is a deeply creative act wherein the musician is concurrently composing and performing. During this process there is evidence that the musician is co-activating the neural networks responsible for rational and non-rational cognition.<sup>13</sup> Jazz improvisation is an advanced skill. A long process of learning musical language is required prior to developing the capacity for improvisation. Similarly in medicine, many years of preparation are needed to acquire the foundational knowledge necessary for practice. But then physicians are also potentially tasked with developing improvisational skills – advanced skills that allow them to creatively apply themselves to the clinical encounter – to spontaneously improvise in a manner that is attuned to the patient, clinical situation, and context. Some practitioners may develop these skills organically as they progress towards mastery. But a focus on the development of creative capacities is rare in medicine, and support for the attainment of such skills is uncommon.

One area that holds some promise with regard to development of increased creative capacity in medicine is the application of contemplative practices such as mindfulness meditation. In recent years mindfulness practice is frequently being employed as an intervention to support physician well-being. <sup>16</sup> But certain forms of mindfulness practice are also known to enhance creative potential. For instance, open monitoring meditation – a practice in which an open, allowing, and nonjudgmental attitude is cultivated towards whatever phenomena are arising in awareness – has been shown to be associated with increased creativity. <sup>17</sup> Open monitoring meditation facilitates an ability to be non-reactively present from moment to moment, while simultaneously maintaining a discriminating awareness. This form of meditation has also been shown to co-activate the brain sites responsible for both rational and non-rational cogntion <sup>18</sup> – similar to Beaty and Jung's findings with creative improvisation in the arts. <sup>13</sup> As such, open monitoring meditation can be understood as an integrating practice – a practice that supports the development of a creative mind.

While creativity is often aligned with the arts it has no boundaries and potentially adds vitality to all areas of human endeavor, including medicine. Yet the idea that creativity is desirable in medicine is infrequently considered, and ways to develop this capacity are rarely offered. As suggested in this article this can be understood from a historical and developmental perspective. But as medicine moves forward perhaps the value of our creative potentials will become more evident and result in a greater dedication to this area. The potential rewards of such a development are not only the enlivenment of the individual physician, but also an infusion of additional creative dynamism into the profession.

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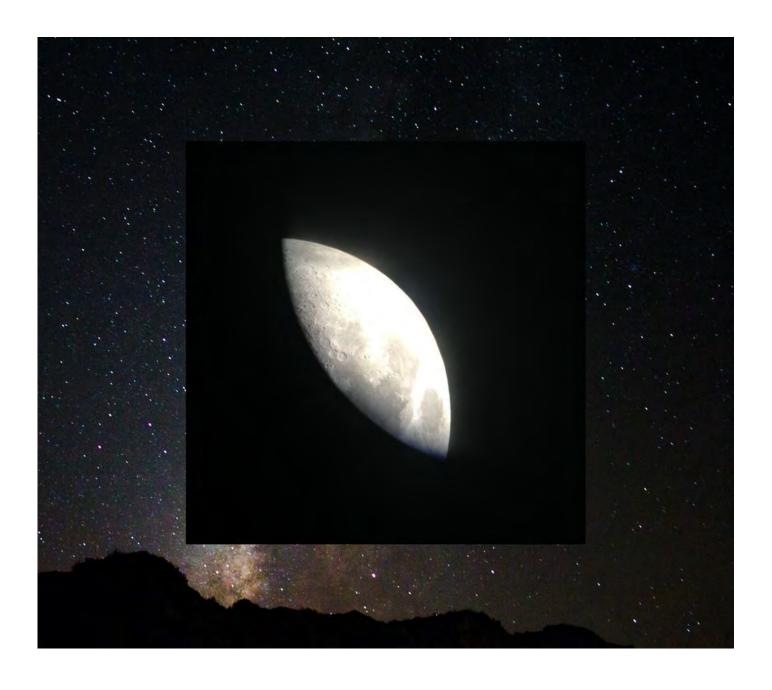
**A study of two subjects.** Kyung Moo Kim



Kyung Moo Kim is a medical student at JABSOM.



**Near & Far** Kelli Kokame

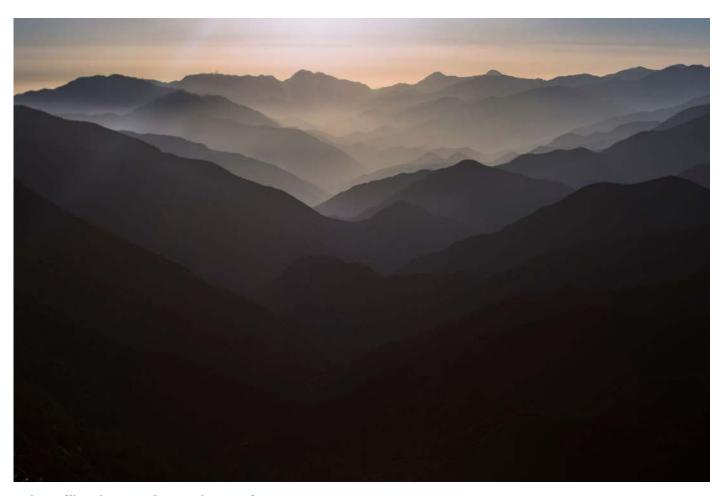


Kelli Kokame is a medical student at JABSOM who enjoys doing photography as a hobby.



**Highways**Vina Cristobal

Vina Cristobal is the Communications Coordinator at University Health Partners of Hawaii, the faculty practice of JABSOM. She has a passion for telling stories through visual arts. In her free time, Vina loves to spend time with family and friends, bullet journal, photograph, try new food places, and serve at her church, Pearlside. She is also the co-curator of Storytellers Hawaii, an instagram-based platform dedicated to sharing Jesus' love through others' stories.



The Hills, The Peaks, & The Horizon Ryan Yanagihara, M.D.

Ryan Yanagihara, M.D. was born and raised in Honolulu, HI. He graduated from the University of Washington and earned his MD from the University of Hawaii in 2019. He was the JABSOM Class of 2019 historian, and he enjoyed the privilege of photographing and documenting the achievements and camaraderie of his peers. Ryan will continue his training at the University of Washington in ophthalmology.



**Untitled**Anonymous

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#### Note on English and 'Olelo Hawai'i:

These are the two official languages in Hawai'i. Readers are referred to the relevant dictionaries for words they would like additional translation. Everyday words used in this article are not translated or defined, whereas words with specific meaning in the Puni Ke Ola program are translated and defined in greater detail.

#### Note on Blinding:

This manuscript has not been blinded. We share our personal experiences and identify ourselves both in academic terms and familial terms.

#### Introduction: Hoʻa Mana

by Kanoelani Davis

Healers and leaders are those who have ignited all that is within them, they have experienced life in their own ways and have seen things that have shifted their perspective so that they do not need to remove or avoid, but they may engage and embrace. This understanding was known by our Native Hawaiian ancestors in the form of ho'a mana - which means to ignite from within. This method was used by our people precontact, and coincides with what we know today as ho'oponopono.

A youth health promotion and drug prevention program called Puni Ke Ola (PiKO, described below) adapted this method into the program under my guidance as Kumu. Hoʻa mana is a method taught to me by my grandfather Kahupono Francis Wong. And it was hand-

ed down to him by his grandmother, and grandmother before her, from Ka'u. The revitalization of the ho'a mana process has been necessary, as technology and social media have become prominent factors in the detriment of how we view life as individuals. Our independence and self-identity are at risk of being influenced on so many levels, which leaves our 'ōpio confused mentally and emotionally. This leads to fears, attachments, and finding validity in ways that may not support health.

Hoʻa mana takes one out of darkness - the fear, the unknown, the lost - and creates the kindle to revitalize light - awareness, inner fortitude, resilience. The method in which we hoʻa mana is with key flames: kaona - hidden meanings, and makawalu - depth in perspective. Together, these Hawaiian values, beliefs, practices and skills are integrated with photography. When one becomes familiar hoʻa mana, they then are able to see things beyond their own experiences and gain empathy and foresight. This is a practice in which we activate the naʻau through kilo, or observations. We practice communication and connection both on a physical level as well as emotional and mental levels. The goal of combining the spiritual level takes committed practice and becomes attainable in the long term through experiential health programs like PiKO.

In PiKO the 'ōpio dig deep within themselves and their relationships to share their thoughts with depth and foresight to help their peers, and to become healers and leaders for today and the future. Ho'a mana allows us to first maopopo pono (act accordingly) so that we don't have to get to a place of ho'oponopono with others because we began with good choices.

#### A Native Hawaiian Model of Substance Use Prevention

described by Susana Helm, Ph.D.

Health interventions that capitalize on community and cultural strengths are more likely to be effective and sustainable, in part by ensuring cultural alignment between the community and the intervention (Okamoto, Kulis, Marsiglia, Holleran Steiker, & Dustman, 2014; Rehuher et al., 2008). This paper is an example of how leaders representing a set of Native Hawaiian communities and a team of prevention scientists based at JABSOM have collaborated to develop a Native Hawaiian model of substance use prevention using photovoice (PV), an arts-based approach to health (Helm, Lee, Hanakahi, Gleason, McCarthy, & Haumana, 2015). PV is a technique in which the people impacted by a public health issue become photographers to document the problem and frame the solution (Wang & Redwood-Jones, 2001). In our case, the source of the problem of substance use was identified as historical cultural trauma and ongoing loss, and the solution was identified as occurring through the lōkahi triangle and aloha 'āina (Helm, Lee, Hanakahi, Davis, Haumāna, 2015; Rezentes, 1996).

Puni Ke Ola translates to "life flourishes in a healthy community." As such, PiKO is an example of culture-as-intervention in that cultural assets - knowledge, practices, places, spirituality – remain intact in the community and engaged in through meaningful relationships (Yamane & Helm, under review). In this way, the community retains its intellectual property while the haumāna learn and hone themselves as healers and leaders. We initially used PV as a community-based participatory action research strategy (Freire 1999a, 1999b) for the intervention development phase, but haumāna insisted the technique should be retained as an essential component of the intervention (Helm, Lee, Hanakahi, Davis, Haumāna, 2015).

PiKO is implemented across several months and consists of four activities that embrace

core cultural values that recognize youth as leaders, promote learning by doing, and are grounded in intergenerational transmission of place-based knowledge (Helm & Davis, 2017). Our 2015-2016 implementation feasibility study indicated that youth, family, and the broader community valued PiKO (Helm, Davis, & Haumāna, 2017) and pointed to areas of further development. These promising results indicated that PiKO may be especially effective for substance use prevention among rural Native Hawaiian youth who want to cultivate their identity as Hawaiians (see also Helm, et al., 2019).

#### PiKO+

described by Jackie Ng-Osorio, Dr.PH.

Currently, the State of Hawai'i Department of Health is supporting a larger scale implementation of PiKO with some additional features (the +) to increase the value of the intervention for use with more Hawaiian communities in the future. The core features of PiKO are four-fold with the emphasis on prevention and delaying the onset of usage. The four features begin with an 'ohana night and haumāna training, continue with a series of huaka'i and ho'ala, and conclude with hō'ike. Our larger scale implementation also includes a case management component, with screening, brief intervention, and referral to treatment (SBIRT). The case manager makes the voluntary referral to a community-based state-funded organization that provides youth substance use treatment.

Initially, 'ohana of enrolled haumāna attended an 'Ohana Night to learn more about the program, including kuleana of all - 'ohana, haumāna, and program staff. The 'Ohana Night also serves as the kick-off for the haumāna training. Among other program aspects, training entails photo ethics intentionally engaged in PV-inspired projects (see Wang & Redwood-Jones, 2001).

The second phase is the huaka'i. These are culturally immersive field trips which involve photography, and are led by cultural experts from the community, chaperoned by the Kumu; and 'ohana may participate, too. PiKO huaka'i are place-based and have great relevance to the community in which PiKO is taking place. Given a PiKO goal is to nurture healers and leaders, it is important for haumāna to understand their relationship to their place. Haumāna take photographs based on the specific learning objective of the huaka'i, about which they narrate in individual writing (Ho'ala Guide, see below) and through group dialog facilitated by the Kumu.

The third phase is the hoʻala. Haumāna explain how their photographs relate to them, the place, and the goal of the huakaʻi vis a vis substance use prevention. It is through the hoʻala that haumāna's voices are heard. With each session, the haumāna are able to build connections, relationships, and greater confidence in their sharing of what they are learning and experiencing. Note that the huakaʻi and hoʻala occur in tandem, and PiKO is a series of huakaʻi and hoʻala across many months.

The final phase is the hō'ike. During this community celebration, haumāna demonstrate to their 'ohana and community leaders what they have learned as a community healer and leader (e.g. Helm, 2013). The ho'a mana, kaona, and makawalu becomes evident as it relates to life flourishing in their healthy community.

#### Hoʻala Guide

created by Kanoelani Davis

How do we engage our haumāna? Yes, they can take photos. Yes, they can describe the photo. But how do we activate their inner thoughts and communication? We let them be themselves in a space where their voices matter. For PiKO, I engaged in deep structure cultural adaptation of the SHOWED technique in PV to create something that was closer to Native Hawaiian thinking and viewing of the world (Resnicow, et al., 1999; Wallerstein, 2004). In the process, the PiKO Hoʻala Guide was born (Davis, 2019).

What does Hoʻala mean? It literally means to awaken, or rise. Used in many chants and prayers for the rising of the sun, it is used both directionally outwards (east) and directionally inwards to awaken consciousness within. Utilizing the method of hoʻa mana and the understanding of the mind universally, I was able to identify activation words (Table 1) to direct haumāna in kaona (hidden meaning) and makawalu (in depth perspective). Once the 'ōpio gather their thoughts and activate, you would be amazed. They have more insight than adults give them credit for. Hoʻala can be used by all ages, even for example, prevention scientists at a national conference (Helm, Davis, Ng-Osorio, Purdy, Antonio, 2020). The PiKO Hoʻala Guide foundation is a pre-contact method of hoʻa mana by means of thought process, which is similar to hoʻoponopono as mentioned above.

Table 1. Ho'ala activation words and concepts.

**'Ike** is not only to see or know: it's to be aware, to have the intelligence to connect yourself to the photo taken.

**Hana**, what created what's in your photo, how did it get there, what makes it work?

**Pili**, how are you, the photo taken, and the environment around it connected? Why did it appeal to you? What memory or experience did it invoke?

**Kumu**, what was the source, the reasoning, what is the purpose and function?

**Ho'omana**, how can this photo and your connection to it empower or rise another from hard choices and decisions?

**No'eau**, in a few words how can you shed wisdom, something that can last a lifetime.

**PiKO**, how does the combination of your ho'ala and voice help those who either are struggling in drug/alcohol addiction or bullying or may be the person enforcing it?

#### **Exemplars of Photovoice with Healers & Leaders**

contributed by Miliopuna Davis, Yheslie Valete, and Mahealani Bright Wilhelm
We three haumāna volunteered to become co-authors on this article (with parental consent) by sharing samples of our hoʻala guides (Table 2) and huakaʻi photos (Figures 1-3).
Due to the pandemic, the huakaʻi is self-selected and inspired through virtual activities facilita-

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ted by the Kumu. This year, huaka'i were bounded by our own backyards and surrounding community places.

Table 2. Hoʻala Guide Exemplars

Hoʻala Guide by Miliopuna: "I took this photo 'cause I thought even when something is not going well, there is always gonna be something that can bring just a little color and joy in life."			
ʻlke	Here is a simple flower in a frame. One may think it's exotic, which it may be, but simple in this instance is that it's not complicated vs insignificant.		
Hana	Something as simple as a red flower, but it pops through everything. The flower stands out and is the only on the branch which makes her both strong and passionate.		
Pili	The flower is simply thriving in a dry area that doesn't get much rain. Its vibrant colors popping out in a forest of dry grass. It's able to stand strong even in the [worst] conditions. There are moments I feel the same way with my classmates.		
Кити	The continuation to thrive and shine in adverse eco systems shows how resilient plants are. Even if no one is paying attention to the plant, the plant will continue on.		
Hoʻomana	When people, or your environment around you, [are] being damaged or hurt - your bright colors and love can out shine and bring happiness.		
No'eau	Be your own brightness regardless if everything around is dark.		
PiKO	When dealing with peer pressure, bullying, addiction, remember this flower. How it still was thriving in places that may not seem deemable. Be resilient, stick out and be courageous.		
Hoʻala Guide by Yheslie: "'Auhea wale ia 'oe?" (photo of Halawa mountain top with sky above)			
'lke	I see mountains, plants, my island home, a new place, the bright blue sky. I feel excited for the day and what it may bring.		
Hana	I see the mountains of my home, Molokai, for the first time in this way. My first trip to Halawa, [the] action of uncertainty and new experiences.		

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Pili	The location is connected to me because, although my family is not from the east part of the island, it's always been somewhere I've been meaning to explore more. Molokai is where I'm from and I haven't even visited all the sites yet.
Kumu	This photo was taken to capture a memory of my island home before I leave and move away. I also took this picture to be able to signify new experiences, because my family came to Hawai'i for the first time over 28 years ago and I'm from their new discoveries.
Hoʻomana	I took this photo to show the mountains against the sky because it reminds me that there are always paths to take and mountains to explore. It helps me see that the sky is the limit and that I'm from choices made [by] my people that came before me, whether that be by blood or choice.
No'eau	This picture could encourage others to focus on their choices because each of their choices might influence their future or their descendants one day.
PiKO	"Look at the mountains and then the sky, the mountains cannot choose what sky to fall under, and the sky cannot choose whether or not to be blue, but you can always choose what you want and not want to do."
dead ends. The noticed how the saw that the stem my name becafeel like it cuts the full moʻole when seeing the	by Mahealani: "This picture that I took is a plant that has some be reason I chose to capture this particular plant was because I he ends were different yet the plant was recognizable. To me I seems were not yet completed and have stopped. I think it defines have I know what mahealani (brightest warm moon) means, but I off from there like the plant. I do know what it means but not lo behind the name and what it means to Hawaiian culture. So, the plant and the ends of it not yet fully grown I see my name not go an understanding of the story behind Mahealani."
ʻlke	When looking at the environment surrounding me I saw stone, as it was on our porch and not in the yard. I thought of how, though there were man-made objects, there was still the beauty of nature.
Hana	I can see the outside of the plant and only guess what's going on inside. I may think that the plant is trying to heal itself and regrow, exposing itself to a new life. I see this as branching off and learning new things like my name and the story behind it.

Kanoelani Davis, Miliopuna Davis, Yheslie Valete, Mahealani Bright Wilhelm, Jackie Ng-Osorio, Dr.PH., & Susana Helm, Ph.D.

Pili	This picture has connected with me because I feel it is a representation of my knowledge in Hawaiian culture. My name for example - I know the meaning but I do not know the mo'olelo and the importance it holds in Hawaiian culture.
Kumu	I think the reason for this is that I've always thought I didn't know enough and I didn't connect enough with the culture. It is my culture and I have not been able to learn enough about it. I believe the reason I associated my name with this picture was to get a better understanding of the meaning behind it.
Hoʻomana	I think my thoughts in this process could empower others to learn about their culture and their lineage. Being able to recognize where you're from and embrace it is a great reason to learn.
No'eau	I would like to help my peers to better understand where they're from and hopefully they will be able to help others as well. If one person is able to start it, then it could have a ripple effect. Being able to know your culture and understand the ways of your ethnicity should be a gift for all.
PiKO	Preventing the mistake of never knowing your culture. It's good to start early but it's also good to at least start when you think it is right. No matter how old, it's always better to try and learn. Being able to see things differently now that I know I would like to learn more can help me help others in their journey as well.



Figure 1. Huakaʻi photo by Miliopuna.



Figure 2. Huaka'i photo by Yheslie.



Figure 3. Huaka'i photo by Mahealani.

Kanoelani Davis, Miliopuna Davis, Yheslie Valete, Mahealani Bright Wilhelm, Jackie Ng-Osorio, Dr.PH., & Susana Helm, Ph.D.

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Kanoelani Davis serves as the Kumu Hoʻa Mana at Puni Ke Ola. Kanoelani also is the CEO of PoMahina Designs; CEO of Mana Bombs, LLC promoting emotional well-being; founder of Hoʻa non-profit for emotional well-being for Native Hawaiians, Indigenous Peoples focusing on Single Parents; and Co-Facilitator of Indigenous Leadership Institute.

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# Thank you, 2020: A year-long lesson in empathy for a lifetime of greater joy

Winona Kaalouahi Lee, M.D.

Dumpster fire. Unprecedented. Canceled.

Horrific news headlines, anxiety-provoking social media feeds, and a sense of overwhelming despair initially come to mind when I think about the year 2020, but as I move closer into stillness and reflection, I see something brighter and more hopeful. The year 2020 could be called a disaster, but it could also be seen as a beautiful mix of pain, heartbreak, resilience, and joy. As of February 28, 2021, authorities in 219 countries and territories have reported 110.4 million COVID-19 cases and 2.4 million deaths due to SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2), more commonly known as the COVID-19 pandemic.1 Coronavirus has reached the shores of every continent on the planet and likely impacted each and every one of us in some way, shape, or form.

February 2, 2020 Super Bowl Sunday

Much like the tragic events of September 11, I remember exactly where I was when I first learned about strange cases of pneumonia affecting individuals linked to a seafood market in Wuhan, China. We were at my brother and sister's home for our family Super Bowl celebration. As we ate and laughed about who just won the first quarter of our family "pool," I looked at my phone and watched a short BBC report shot near the market and thought, "Oh wow, I hope they are okay." My husband Jerome's family is Taiwanese, and I have been to Taiwan at least 6 times during our 20 years of marriage and was used to seeing strangers in surgical/cloth masks while riding the metro in Taipei. I remember briefly thinking about its consequences for China and possibly Taiwan. However, it quickly left my mind as it seemed very distant to me.

March 13, 2020 March Madness (literally)

Energy filled the air as 'Imi Hoʻōla graduates and medical school colleagues joined me at the State Capitol to provide testimony in support of a Senate Bill that would sustain 'Imi Hoʻōla student stipends that are generously funded by the Queen's Health Systems. Excitedly, with support of 'Imi alumni, JABSOM faculty, and community supporters, the bill had successfully made it to the House Finance committee. Fast forward 10 days later, Governor Ige's emergency proclamation initiated a necessary statewide shutdown with the exception of

essential workers through April 30th. Sadly, when the shutdown occurred, the state legislature abruptly halted its session, and our bill was stopped in its tracks - with no means to be revived again. I urgently convened faculty and staff meetings to discuss how we would continue our Native Hawaiian Center of Excellence and 'Imi Hoʻōla Post-Baccalaureate programs despite the government shutdown. Thankfully, students, staff, and faculty were patient and willing to work together through this challenging time. JABSOM and University of Hawai'i at Mānoa leadership developed procedures that included teleworking plans and we quickly taught faculty the technical skills required to teach all courses virtually. I also remember talking with Jerome to make the necessary but difficult decision to cancel our annual reunion with his family in Oregon, an early hotspot in the pandemic. As many others did, we canceled our plans for spring break and witnessed what would soon unfold to be one of the most challenging years we have faced as a community and nation.

May 25, 2020 A spark that lit the fire for social justice

Two words: George Floyd. Social injustices that long existed were now staring me straight in the face. The summer protests in support of the Black Lives Matter movement brought people together on both sides of the argument. Is racism alive and well and had I not been fully conscious of it? I had been a part of the Mauna Kea indigenous rights movement, but did not think about the impact of long-standing institutional racism that plagues our country's history and exists within higher education and our health care system. Racial injustices sparked battles between strangers on social media and families at the dinner table. However, it also provided platforms to invoke accountability and real change. I more deeply understood how important it was to start by reflecting on the implicit biases and cultural lenses that we hold within ourselves before we can teach our students and help others to see different perspectives. It's important to be honest about our judgments and turn inward before putting our voice outward. I am still challenged by this; however, I am finding ways to place myself into situations and conversations with those who think differently from me in order to acknowledge unique perspectives and improve how I approach the world.

December 31, 2020 Empathy - the healer's gift

The social gaps in health care services and the negative impact of health disparities were amplified by COVID-19. The disheartening statistics highlighting the disproportionate impact of coronavirus on Filipino, Native Hawaiian, and Pacific Islander communities also brought to light the strength of community leaders and frontline workers as well as unsung heroes who answered the call by providing financial support, holding food drives, and offering help to the most vulnerable. Demonstrating empathy, connecting with others, and activating support for those who faced new mental health challenges due to the economic downturn and loss of the life we knew before the pandemic was a critical part of my own healing.

As physicians, we are expected to have compassion and express empathy, however, the ideal steps to empathize with others are not always emphasized within medical education.

What are the steps to empathy? How do we let others know that we recognize their viewpoints as truth in their own eyes? The steps to empathy are: 1) Perspective taking - Taking the time to listen and see the world as the other person sees it; 2) Non-judgement - Listening to the other person without judgment of their story; 3) Understanding - Genuinely attempting to understand and feel what the other person is feeling; 4) Communicating understanding - Communicating back to the other person their story as told and the feelings they feel to express understanding.2 2020 has taught me that demonstrating empathy can be one of the most healing actions you can take, not only for patients but for anyone you care about.

January 20, 2021 Begin again and be better

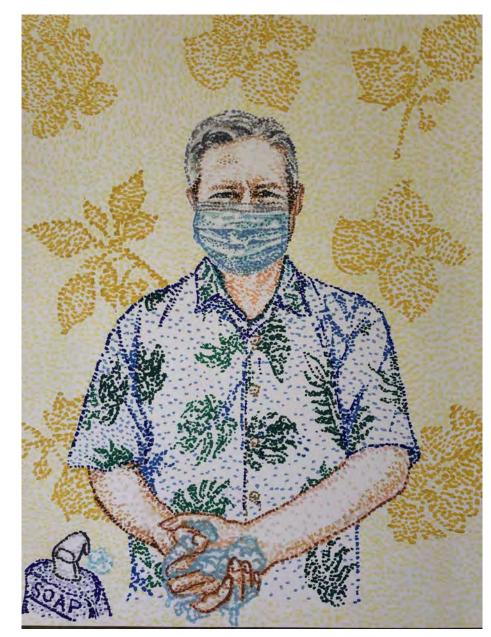
Following the inauguration of President Joseph Biden and Vice President Kamala Harris, my daughter, Jada, shared a reflection that she wrote for one of her school assignments. She shared, "There were many lines that resonated with me from Amanda Gormans' poem 'The Hill We Climb' but one that stood out was, 'But while democracy can be periodically delayed, / it can never be permanently defeated.'3 I think that this is really important and relevant to the historical events that are happening now. I hope that people can continue to learn from Martin Luther King Jr. because I think the world could use more compassion and love. A lot of people, myself included, feel very passionate about social justice which can turn to anger and frustration; however, the best conversations happen when everyone is open to other opinions and respond with empathy, compassion, and love."

I realized that my teenage daughter was much more educated, sophisticated, and aware of current events that shape the future of our nation compared to my younger self as a Generation X adolescent in the 80's. It made me proud as a mom and reminded me that I have to continue to be better in order to not only fulfill my role as a medical educator, but more importantly, as a mother. Although the events we experienced in 2020 have been a form of collective trauma, experienced differently for each individual person, it has emerged as a gift that has taught us the importance of empathy. The year 2020 helped me realize that empathy is an essential skill and prioritizing health, family, and friends are vital lessons that ultimately lead to a lifetime of joy.

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**Keeping Ourselves Safe So We Can Keep You Safe** Jennifer Manyu Wong

Jennifer Manyu Wong was interested in art at the early age of 6. Her passion for it derives from the limitless interpretations and its medium for conveying her ideas. She has been exploring with all sorts of art styles and medium, ranging from representational to abstract. In high school, she began doing pointillism art after seeing a beautiful piece at the museum. In the 2019 Narcissus Pageant, she performed a Chinese speed-painting of transforming a landscape into a horse as her talent. As she continues her journey into medicine, she hopes to carry forward her passion for art and perhaps even one day incorporating it into her medical career.