

SYNAPSES

A NEUROLOGY ART AND LITERARY MAGAZINE



2019-2020

Synapses are **CONNECTIONS** between two nerve cells, allowing neurotransmitters to pass from one cell to the other, enabling electrochemical communication to occur.

The Synapses Art and Literary Magazine is a project through the Department of Neurology at West Virginia University. It is supported by the Back to Bedside Initiative through the Accreditation Council for Graduate Medical Education (ACGME). The Back to Bedside Initiative is awarded to groups of residents throughout the country to encourage the development of innovative project ideas that will foster a connection between themselves and their patients. The goal of the Synapses magazine is to promote humanities amongst patients and residents through the use of artistic expression. Residents deal with burnout, stressful situations, and emotionally draining experiences, often without an outlet to express these experiences. Likewise, the patient experience in the hospital can be frightening and intimidating and a variety of chronic illnesses can also have longstanding impacts on patient quality of life. This goal of this magazine is to showcase the artistic expression of both patients and medical providers, and ultimately allow for a meaningful way to reflect on their experiences. Just as synapses promote connections in the neurologic system, we hope the Synapses magazine will promote connections between patients and their providers.





WELCOME TO SYNAPSES

Welcome to Synapses! We are honored to be the faculty mentors for this innovative and fun project. The focus of these artistic pieces is to bring healthcare providers closer to their patients. While the COVID-19 pandemic has impaired our ability to spend more time at the bedside, we can still share close experiences with our patients.

This collection showcases those bonds. We hope you enjoy!

Eric Seachrist, MD and Gauri Pawar, MD

MEET THE SENIOR EDITORS



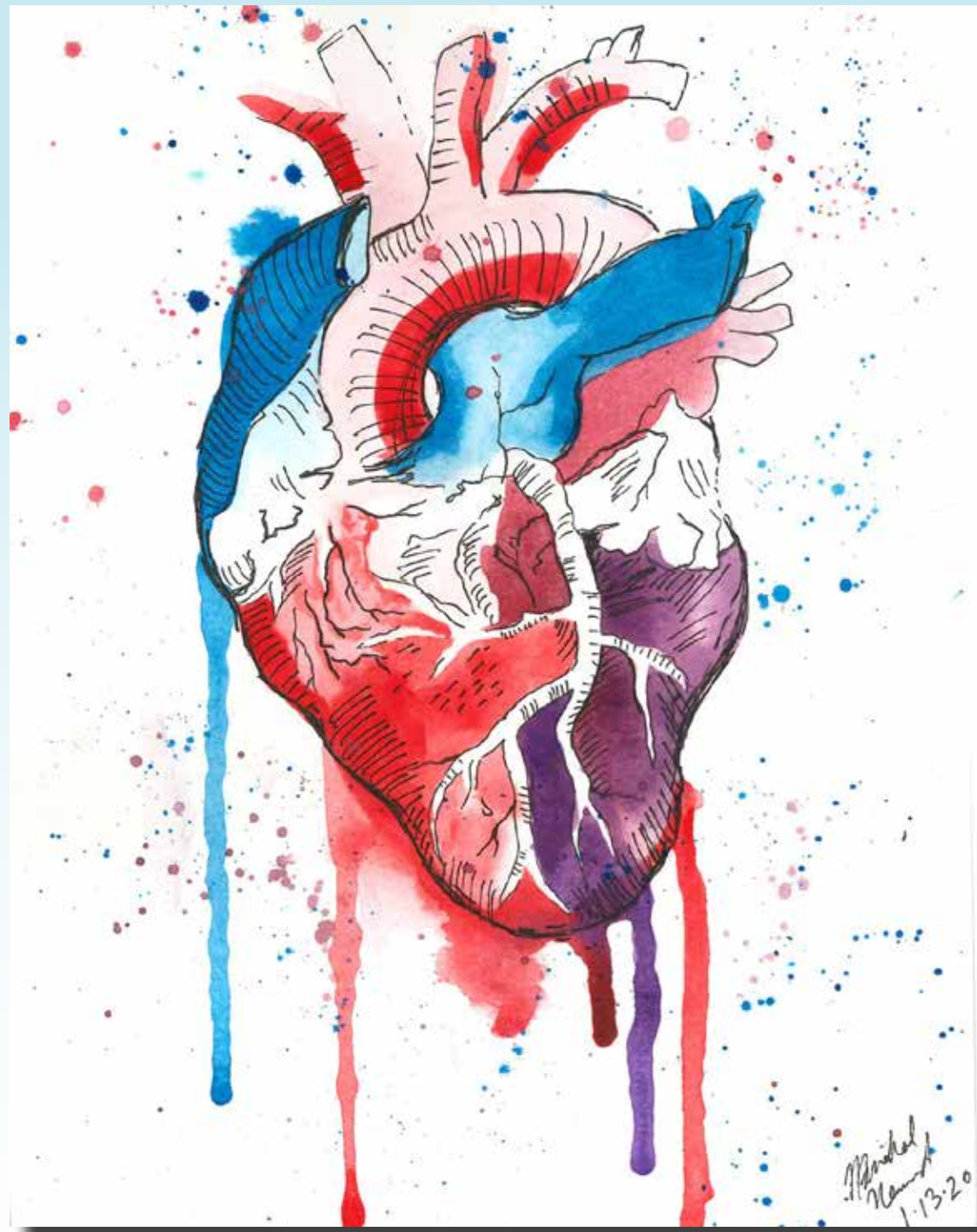
Jessica Frey completed her neurology residency at WVU in 2020 and will be pursuing a movement disorder fellowship at University of Florida. She also served as Chief Neurology resident during her final year of residency. She is passionate about the humanities and has served as the Editor-in-Chief on various literary magazines in the past. She enjoys spray painting, acrylic painting, and creative writing, especially pieces that combine her passion for medicine and poetry. You can find her work in national medical journals such as JAMA, Neurology, and Annals of Internal Medicine.

Faraze Niazi is completing her neurology residency at WVU in 2021 and will be pursuing a neurocritical care fellowship at Washington University in St. Louis. She is currently serving as Chief Neurology resident during her final year of residency. She has a passion for humanities, ethics, and history of medicine. She also has a vested interest in the intersection between medicine and humanities and has published several pieces related to these topics.



Camila Moreno-Escobar completed medical school at Universidad Nacional de Colombia, then worked in neuroscience research at Albert Einstein College of Medicine. She is currently a PGY3 in her Neurology residency at WVU. She enjoys listening to music, cooking, painting, and reading.

HEART



Minahal Naveed
Medical Student
West Virginia University

Scott Porterfield

WVU Medicine Employee
Centralized Scheduler for Morgantown Family Medicine

I mostly try to take photographs of things in ways that most people wouldn't typically see. I like to use natural shapes of things, such as the circle around the light bulb in "Days Past" as a kind of centerpiece to photos.



DAYS PAST

Prasuna Kamireddi, MD

Neurology Resident
West Virginia University

Inspiration to my art are some of my patients who hold on to hope and positive attitude despite their progressive debilitating neurological condition which we sometimes fail to diagnose.



HOPE

MARLBORO SEASON

i.
twin gold rings
nestled inside the
heap of snapped
toothpicks, where
they forgot how to
glisten, like eggs
abandoned by a
mother, as the first
frost creeps up on
the baroque ashtray

ii.
little hollow boxes
wreath the noble fir
in white & gold,
but enough Eves
have passed us by
in hymn-less silence
to know they aren't
gifts, only fossils
of another marlboro
season gone by

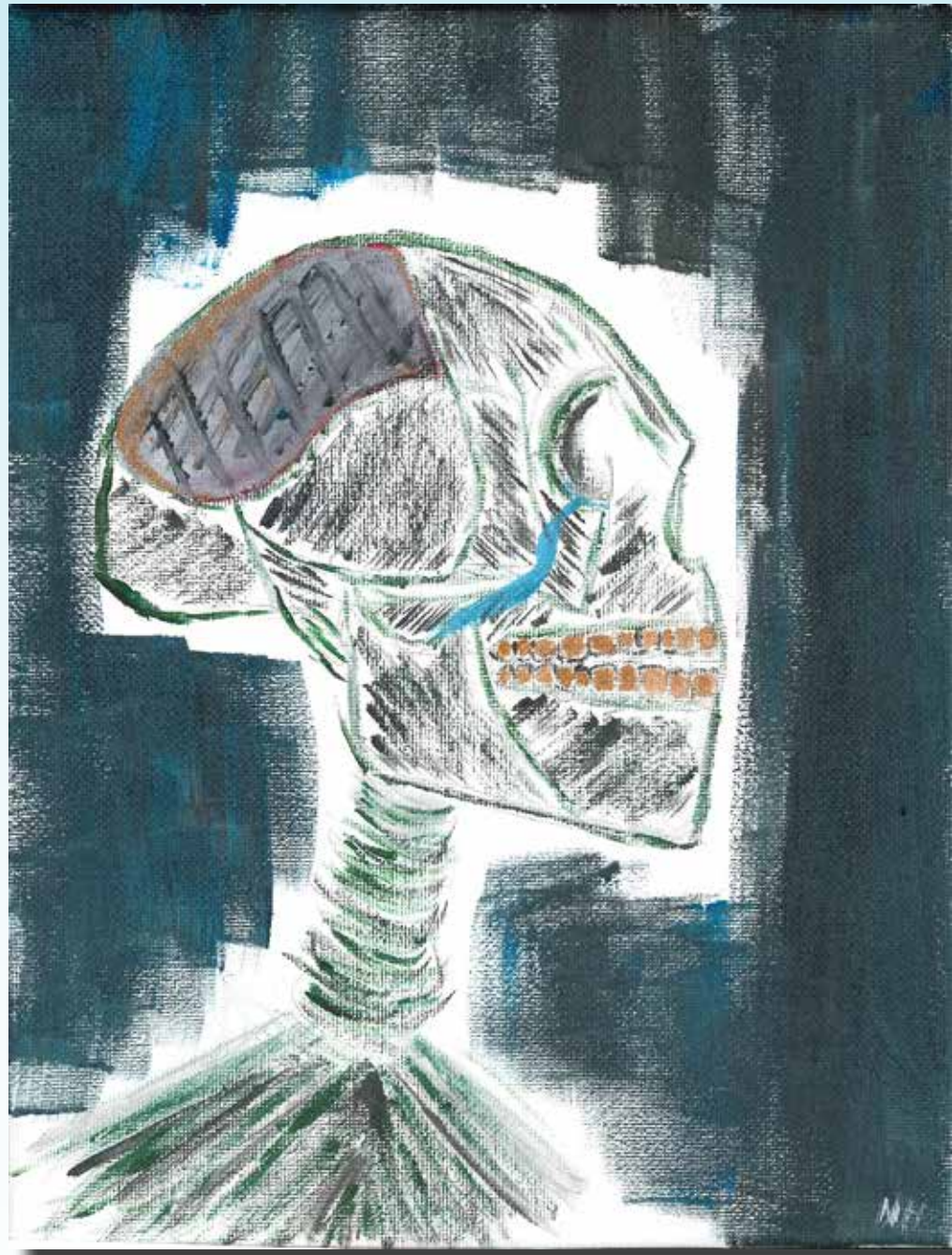
iii.
the pearl brooch
peaks out of its
canopy of fingers
on nights when
whiskey & wine slop
over cardamom
fleece, still yearning
for the first specks
of sunlight to sneak
past the curtains

Harika Kottakota, BS

Undergraduate Student
Stanford University

This poem was inspired by the severe psychological impacts of drug addiction, a public health crisis which continues to plague our nation.

SOLITUDE



Natalie Hobeika

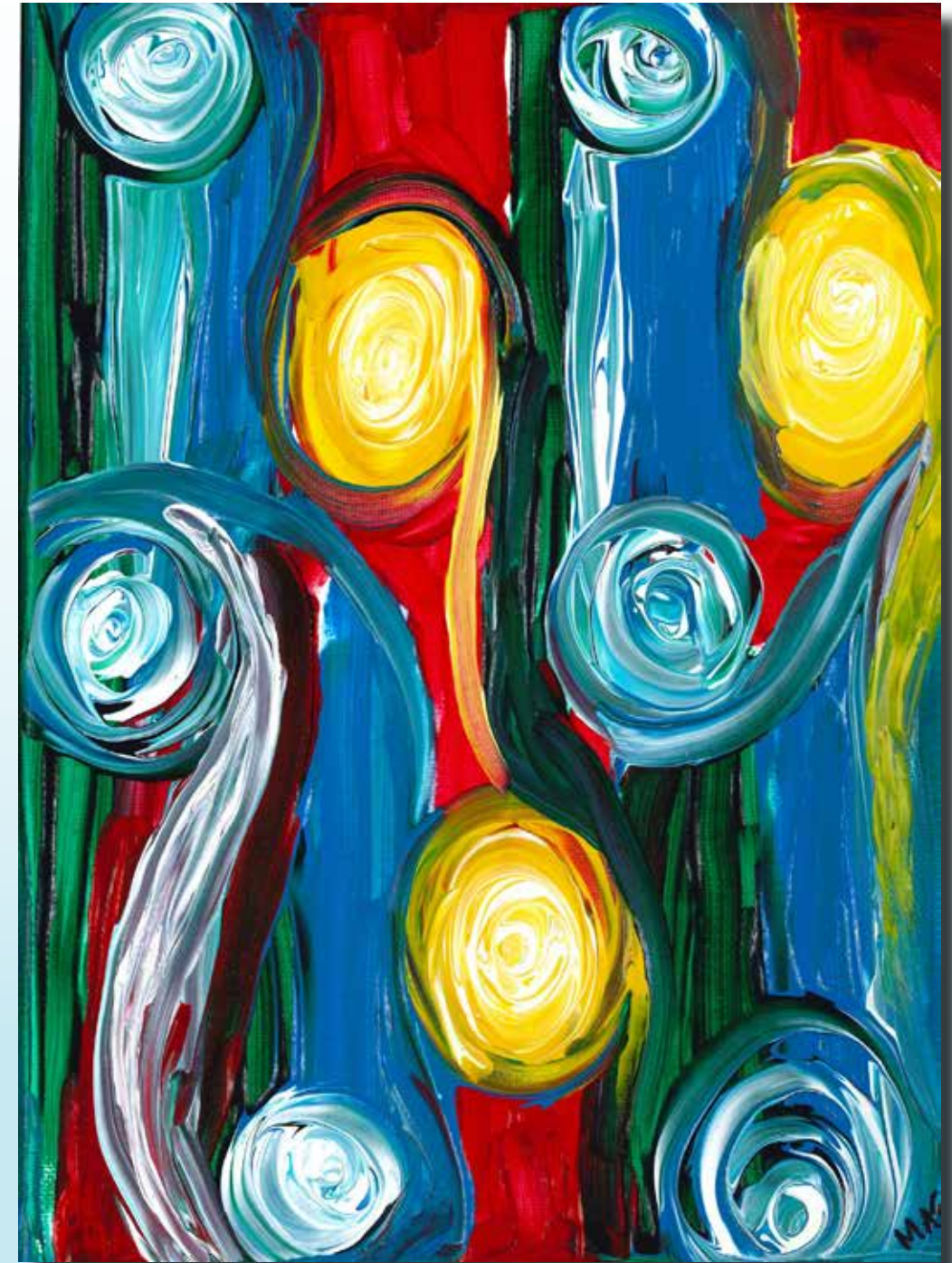
Medical Student
West Virginia University

As a patient was receiving life-saving treatment through a port in her head, the absence of a support system hit hard on my conscience. Despite not being able to communicate with the patient, the look in her eyes displayed a type of sadness I could never comprehend.

Meghana Raghavan, MD

Neurology Resident
West Virginia University

Burst of circular lights due to crossed wires, a technicolor premonition of a brain in storm.
Once described to me by a patient regarding the visual phenomena seen with her focal occipital seizures.



AURA

Ryan McCarthy, MD
Internal Medicine Faculty
Martinsburg, WV

This poem captures the emotions of a primary care doctor working at a computer all day. While the computer improves patient care, the doctor suffers loss of identity and loneliness. Told from one doctor's point of view, this poem speaks to a common experience today in American healthcare.

This computer
Has broken me. For sure
But. I can see patterns
And spy the coming illness
anemia
kidneys failing
bone marrow breaking
Subtle sickness. To these trained eyes.
In my office, I stare. Alone.
I do not talk, I think. Alone.
I read. I keep typing. Alone.
My tea steams. My neck aches. My head throbs.
This computer: makes me more capable.
As a thinker.
To fix my patients.
With data. And thinking. And typing.
This computer: has taken a piece of my sanity.
Maybe a part of my soul. Typing.
Maybe wires are growing inside me.
Rub my head. Check the news. Read email. Look at lab
work. Think.
Data
Glance at my schedule.
Decide.
Sign prescriptions.
Never ends.

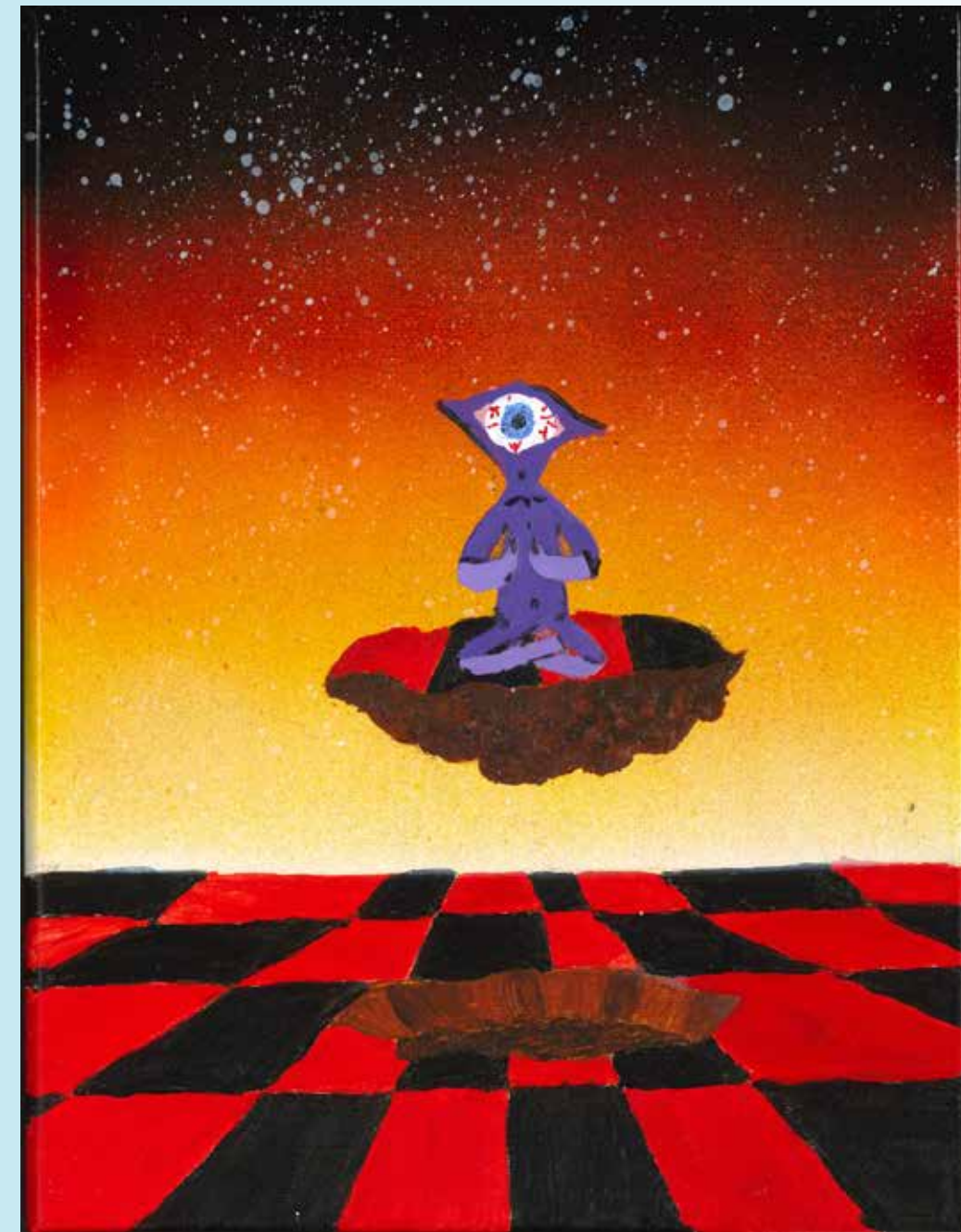
A photo of a younger me on the wall. Diploma. Days long
gone.
Bright smiles. My kids – so small.
Printed photos, yellow and faded.
No data for me in those days.

I used to walk this office. And talk to people.
Say hello. Catch up. Be friendly.
Be a friend. Know others.

Now I just sit.
And work.
And sigh.
With
sigh
This computer.

THIS COMPUTER

CHECKMATE



Jessica Frey, MD
Neurology Resident
West Virginia University

One of the patients I was taking care of on wards expressed his frustration at being in a hospital for the third time that same year, saying that he felt very much like a pawn in a chess game. I wanted to capture both his frustration and his sense of loneliness in a very surrealistic manner. The alien represents how the patient feels in the strange world of the hospital and the levitating chessboard represents the hope that this patient will be able to transcend these experiences and heal.

A SEIZURE, A HELICOPTER, AND A GRUMPY OLD MAN

Seizures are not humorous matters. At least they should not be, and especially to neurologists. However, there are contexts in which humor seems inescapable.

“Corporal, you just had a seizure. You have a long history of seizures. You have to take your seizure medications,” I tried to explain.

“But if I take seizure medications, I will be sent home.”

“That is exactly right. And, that is exactly where you are going.” I was becoming tired of explaining this concept.

This was Kuwait. This was war. This was Operation Iraqi Freedom. This soldier was a member of the Army National Guard who was transiting Kuwait on his way to Iraq. This scenario just kept repeating itself. A national guardsman would inform medical personnel at a mobilization site that he or she has a seizure disorder and had been taking anticonvulsants. Medical personnel would then inform these soldiers that they could not deploy to a combat zone if they are taking seizure medications. The solution might seem rather straightforward; send them back home.

However, an alternative solution was employed more often than anyone might care to acknowledge. That is, take the anticonvulsant away and put them on a plane to Kuwait. Having been in the military for twenty-five years, the logic behind that solution had become understandable to me.

This occurrence was so frequent that providers who initially saw these soldiers only had to say to me, “Skipper, we have another one,” and I knew exactly what they meant.

When these patients had their not unexpected seizure in Kuwait, we put them back on their anticonvulsants and put them on the next medical evacuation flight to Germany. We never saw them again. That is, except for one female soldier. It seemed someone in Germany decided she had catamenial epilepsy, again took away her anticonvulsant, and put her back on a plane to Kuwait.

“What do we do this time, Skipper?”

“I guess she disobeyed a direct order not to have menstrual cycles. Put her back on her anticonvulsants, and through-regulate her back to the States. That should prevent any thinking from occurring in Germany.”

Not all seizures, however, occurred in patients with known seizure disorders.

“Am I going to be allowed to return to my ship?” the Royal Navy sailor nervously asked me.

“You have nothing to fear from me. I am going to return you to your ship. What happens after that will be up to the Royal Navy,” I replied.

Earlier that morning this sailor from a British warship in the Gulf had been evacuated by helicopter to my combat support hospital in Kuwait. He had had a generalized motor convulsion during which he had bitten his tongue and had urinary incontinence. In casualty receiving, an unenhanced head CT scan and neurologic exam were normal.

This British sailor had been working in a very small, tight, and confined space deep in the bowels of his ship. The British medical assistant, analogous to our Navy corpsman, who came with this sailor told me that his shipmates had noted the patient’s legs stiffen and then started jerking. His shipmates then extracted him from that tight space.

This British sailor was in his mid-20s, had no significant prior medical history, and specifically had no history to suggest that he had ever had a previous seizure. Except for his minor tongue bite injury, I found no abnormalities on my examination.

“Were you supposed to be wearing some type of breathing apparatus to get supplemental oxygen when working in that enclosed space?” I asked.

“Yes, Sir. But I did not think the repairs would take that long,” he responded.

“Tomorrow morning, we are going to send you for a brain MRI in Kuwait City. I just want to make sure there are no abnormalities that we could not see on your head CT. If that study is normal, we will return you to your ship. It seems evident that you had a single provoked seizure precipitated by hypoxia or toxic fumes. I am not going to make any recommendations regarding seizure medications or your fitness for duty. That will be up to the Royal Navy.”

The British sailor seemed put at ease with that response.

I returned to my office and began shuffling papers. After a few moments, I glanced up to see my Command Master Chief watching me with a big grin on his face.

“What the hell is wrong with you, Master Chief?” I asked. Anyone who has spent time in the military recognizes that nothing is accomplished without the cooperation of the senior enlisted community. Officers may set direction and course, but the senior enlisted make it happen. The Command Master Chief was the ranking enlisted sailor in my unit. Within the unit, he answered only to me. Junior officers quivered when he spoke. My senior officers knew better than to directly correct him. I could not run the unit without him.

“Captain, do you know our primary landing zone is shut down?” Master Chief said, still grinning. It was obvious he had something humorous to tell me, but he was going to make me work to get it out of him.

“No, Master Chief. I was busy seeing that Brit sailor. You have heard of work, haven’t you? You should try it sometime. It makes the time pass quicker,” I bantered back.

“The only work I can get done around here is putting out fires started by your officers. That Brit helicopter broke down and closed our LZ,” Master Chief explained.

“Alright Master Chief, let’s go see what you find so amusing. You sure don’t need me to clear an LZ”

“Captain, you are going to love this,” Master Chief said as we walked out of the administration tent towards the LZ (landing zone).

There she was, a lieutenant commander in her flight suit. The center of attention surrounded by my sailors, hanging on her every word. The tall slim attractive British helicopter pilot, a damsel in distress, with twelve American sailors all too eager to be of assistance. That is, if intense staring and gawking were providing any useful assistance.

“Watch this, Master Chief. This is going to be classic,” I said as we approached the group.

“Whose helicopter is this?” I asked in a serious and displeased tone, as though it was not obvious. “It has shut down my hospital’s LZ.”

“Captain, my rear rotor is not functioning properly. A replacement part will be flown in tomorrow,” she replied.

“You are not hearing me, Commander. I do not care what is wrong with your helicopter or when it will be repaired. I want your helicopter off my LZ now!”

I turned to Master Chief, “What kind of unit are you running here? There are twelve sailors standing around here doing nothing. Get this LZ cleared now.” A few of the more senior sailors in the group started smiling as they recognized what I was doing. I turned around and walked back to the administration tent.

I could hear the Master Chief barking his orders, “You heard the Skipper, get the fork lift and move enough barriers to get this helicopter pushed off the LZ.”

Fifteen minutes later, Master Chief returned to my office with that same grin on his face.

“What is it now, Master Chief?”

“I think that Brit pilot has you pegged. She thinks you are a grumpy old man.”

I laughed, “And so she should, Master Chief.”

Scott Porterfield

WVU Medicine Employee
Centralized Scheduler for
Morgantown Family Medicine

The “Woods Walk” is something that was inspiring to me just because I like to be in nature, and I love to take photographs of the beauty that nature provides because it is ever changing. A strong wind could come through, and all of the leaves could soon be gone. A hard frost could come and damage what leaves are still around to give all of the hues of fall. That to me is what I love about nature photography, it is never the same thing twice.



WOODS WALK

THE TYPEWRITER

Between the mossy bars
You catch her hunchback
Over the typewriter,
The one marred with craters
Wide as newborn fists
And speckles of ruby wax,
Graphite-smudged hands
Tapping silver nibs to the
Moans of weary oak

On starless nights
She croons old lullabies
Over the typewriter,
Each key a perfect meniscus
To cushion those callus fingers
As the years chisel away
At her pale jaw like a
Drunken sculptor at work

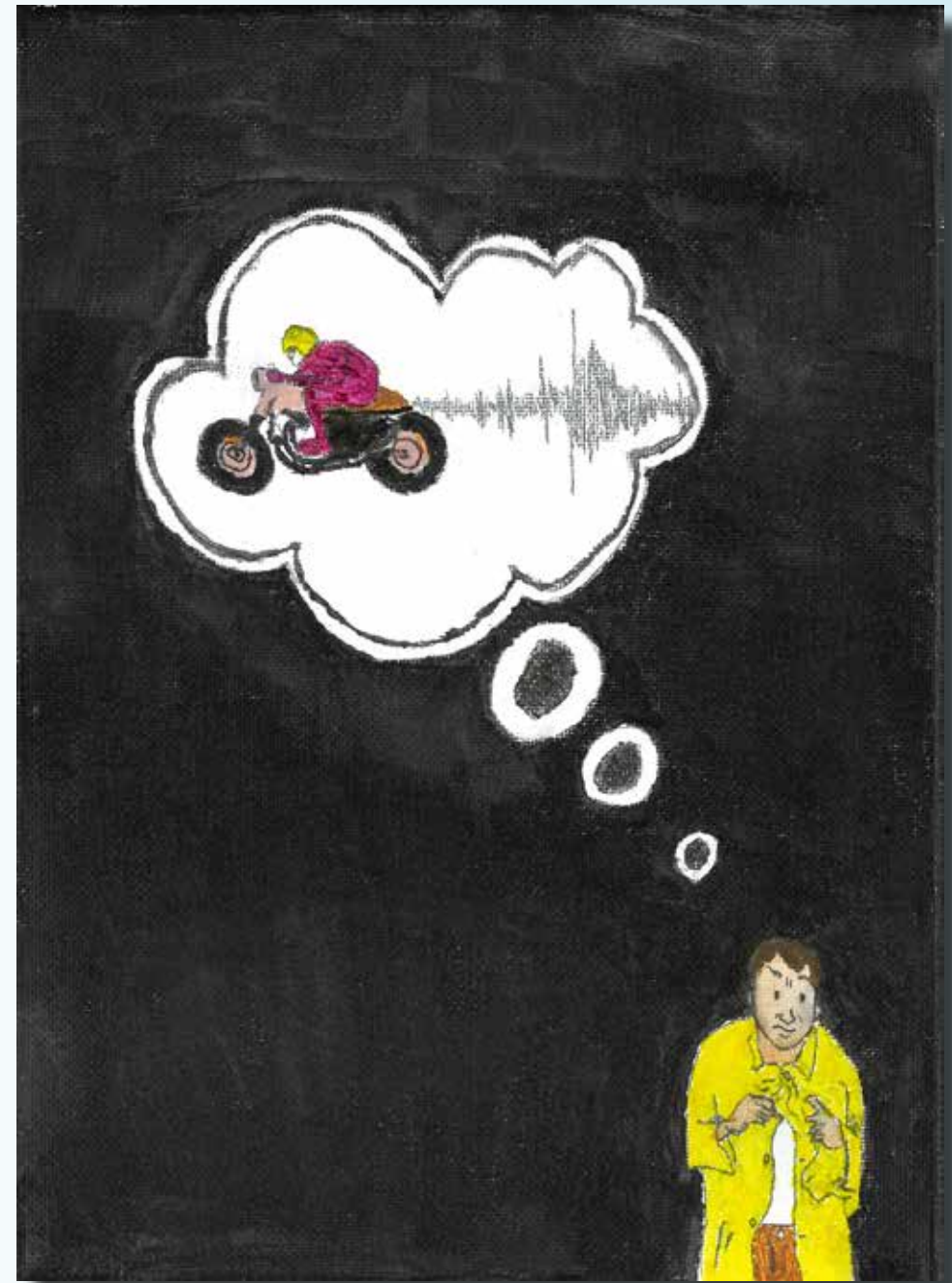
On summer 'noons
You watch her chest-fallen
Over the typewriter,
As copper ink glistens on
Striated biceps: Sole de Gloria,
Hemingway glasses glaring
Back at the lavender sky

Harika Kottakota, BS

Undergraduate Student
Stanford University

My poem, “the typewriter,” pays tribute to Virginia Woolf’s *A Room of One’s Own* in imagining connections between a writer and their own creative space.

REMEMBERING FREEDOM



Mohamed Nasser, MD

Neurology Resident
West Virginia University

A patient with weakness being tested for ALS overheard the staff describing the myotonic discharges on his EMG to the resident as having a sound similar to that of a motorcycle tailpipe when he reminisced of his free riding Harley

Minahal Naveed

Medical Student
West Virginia University



PHASES



THE BUTTERFLY

In the beginning of my residency training, I took care of a young patient with paraplegia and urinary incontinence secondary to spina bifida. She initially presented to the hospital with palpitations and was treated for a urinary tract infection. However, the patient had a history of horseshoe kidney and was found to have an infected staghorn calculus that required surgical intervention. Unfortunately, she became septic and passed away several days after the renal calculus was removed.

Her case had a great impact on me as a Neurology resident and I tried to describe my experience through this drawing. First, I represented the spina bifida because I think it is important to remember that paraplegic patients may not feel pain as we do, or maybe not at all. She did not have any pain and I often asked myself what it could have been like if she were able to feel the renal colic before that stone got infected? Wouldn't these patients need a more thorough surveillance to begin with in order to prevent such complications? This is a question I will still need to explore through my residency and further work.

Also, I tried to represent ventriculomegaly that in her case developed after she had an operation on the spina bifida as a child. This is a common complication and usually requires placement of a ventriculoperitoneal shunt. In my patient, her hospital course was complicated by the presence of this shunt and the risk of the infection spreading to her brain. However, I used many colors for this picture because that is how I remember my patient. I came to know her well as I discovered a strong personality that liked to draw and write poems herself. She agreed to be a part of the "Back to Bedside" before she became hemodynamically unstable. Unfortunately, she was no longer able to share her art with me.

I wanted to represent my experience through this drawing which I called "The Butterfly". Not only do the spinal cord, the ventricles, and the horseshoe kidney look like a butterfly to me, but the patient herself, with her lovely and beautiful smile, reminded me of a butterfly.

Violina Melnic, MD

Neurology Resident
West Virginia University

NEUROPATHY

He looked at his afternoon meal with indolent eyes and his palms faced up as if he were grateful
How if his dog was not terrified by a rat, he might have lost more than a toe
How if the shotgun had worked properly, he might not have been in contact with the rat
How if the family wouldn't pick him up, he'd have no way to get back to his house to kill it
How who knows how many rats have made his home their home, and no, this isn't the first time he's been close to one of them
How if his diet he described as 'usually just meat' somehow couldn't have led to this situation.
And little me, I'm only peeking in the key hole to see rats and shotguns and rotten meat on the counter
And sitting at my kitchen table I see vegetables and a glass salt jar and a cleaned sink I spent the better half of an hour on
But one day I come home to a horrific smell and find a mouse under my sink, guts spilled over its skin—the inside out kind of feeling
And no I don't have neuropathy and I can feel my toes curl when I see the beady eyes
And no I don't have a shotgun
And no I don't need any help, I can manage the carcass myself.

The next question on my list is if he has ever felt depressed
He tells me he's tried three times to kill himself
Three times the bullet didn't fire
He was saved three times only by the inadequacy of a shotgun
But tomorrow morning he will have his third amputation.

The layers of what lead to what and how, how did the teeth bite so deep
And by deep, I mean "Left Toe Masticated By Small Rat" was never taught to be on my differential
Instead, we'll send him home a little lighter and see him back after the rat gets fed again.

Kate Webster

Medical Student
West Virginia University

This poem was inspired by an interaction with a patient during his stay in the hospital. On one level, this piece is simply meant to be a narrative to show a conversation between a patient and a medical student. It is also meant to criticize the shortcomings of healthcare and the inevitable of patient care. In our medical school lectures, we are taught to instruct patients with diabetes to check their feet for 5 seconds each day to protect against wounds. In meeting this patient, I was reminded of how hard we can try to be better healthcare professionals but sometimes something like a rat will outsmart our direction. It is up to us to recognize these shortcomings and come up with preventative measures.

Scott Porterfield

WVU Medicine Employee
Centralized Scheduler for Morgantown Family Medicine

"Inverted Dreams" was the only real shot here that I took time to really plan. I was given a glass ball as a gift this past Christmas to use for my photography, and I quickly learned that it would invert whatever was framed inside. I used that with the lines of the rails to try and for an inverted picture that looked almost like they lead into each other.



INVERTED DREAMS

Sara Dobrzynski, APRN

Neurology/Stroke Nurse Practitioner
West Virginia University

When someone has a stroke and are unable to articulate what has happened, perfusion imaging can paint a picture as to what is going on and lead to a diagnosis and appropriate treatment.



PERFUSIONS

MARBLE INLAY AT THE TAJ MAHAL



Benjamin Silverberg, MD

Emergency Medicine Faculty
West Virginia University

A close-up of the marble inlay at the Taj Mahal in Agra, India. Blue, orange, green, and opalescent stones each catch light differently, their beautiful striations flickering in the daylight.

THE SPIDER IN THE SHOT GLASS

The spider in the shot glass

Coaxed you for the last time

But not long ago you were

Like an inhale of cinnamon,

And now an exhale of smoke

Limbs splayed out bare

Your goose-bumped skin ruddy

Against the old grey wool

Froth white as daffodil still trickling

From your lips to your ears

Harika Kottakota, BS

Undergraduate Student
Stanford University

This poem was once again inspired by the severe psychological impacts of drug addiction.

Sara Berzingi

Medical Student
West Virginia University

This piece was created following a conversation with a patient on the stroke service who, when asked what brings her the most joy in life, said “the colors of the beautiful Gladiolus flowers in my garden.” Curious about the beauty of the flower and lacking a green thumb, I googled “Gladiolus” and learned that it came from the Latin root meaning ‘sword’ and was associated with the strength of a gladiator. In a way, then, it seemed that what gave this patient joy was inextricable from what gave her strength.



GLADIOLUS

Scott Porterfield

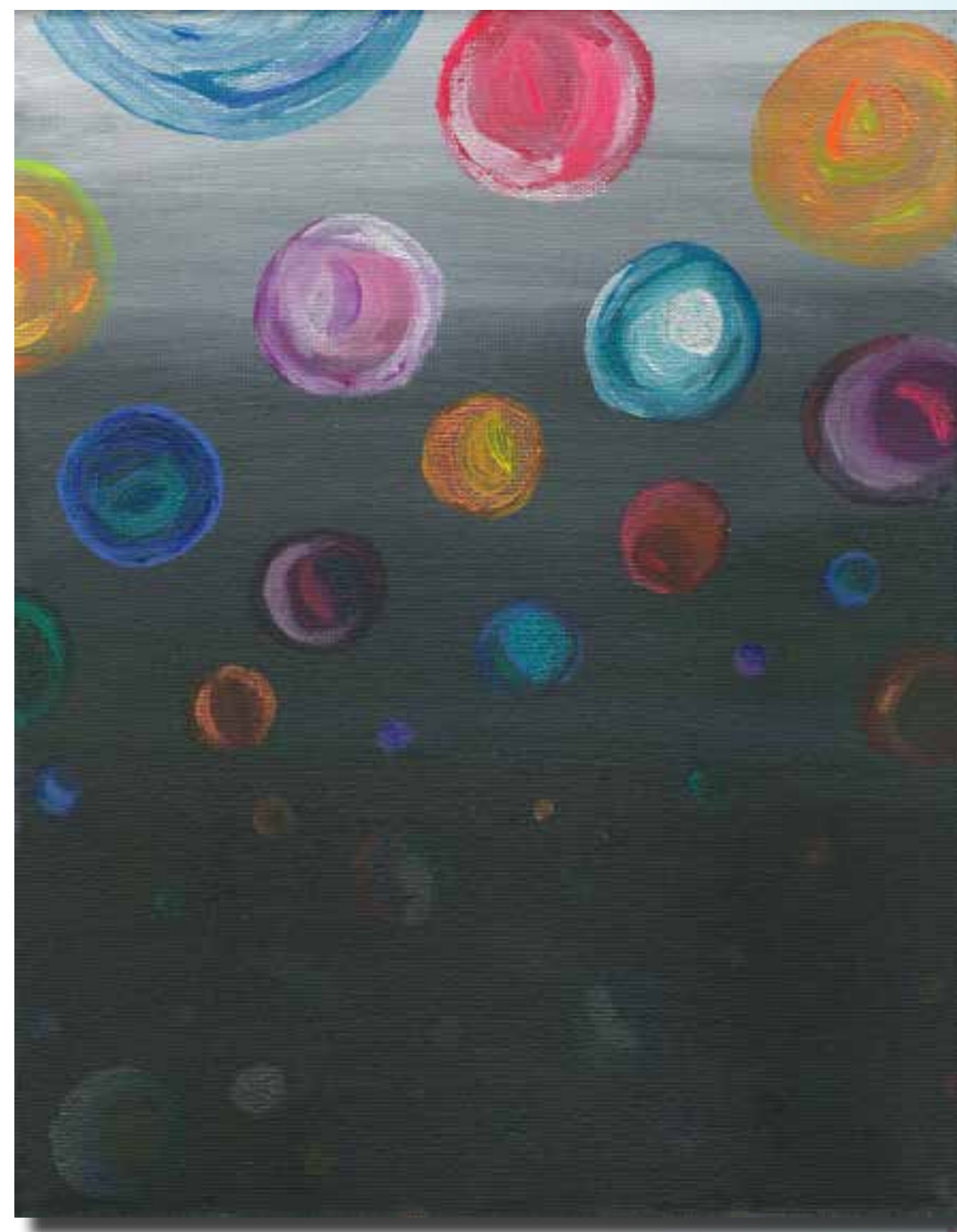
WVU Medicine Employee
Centralized Scheduler for Morgantown Family Medicine

The broken glass of “Shattered Reality” was that of some thick safety glass in a stairwell of a parking garage. I knew that it was broken, and would soon be replaced, but I liked how it sort of distorted the view behind it almost like a broken picture frame.



SHATTERED REALITY

BUBBLING UP

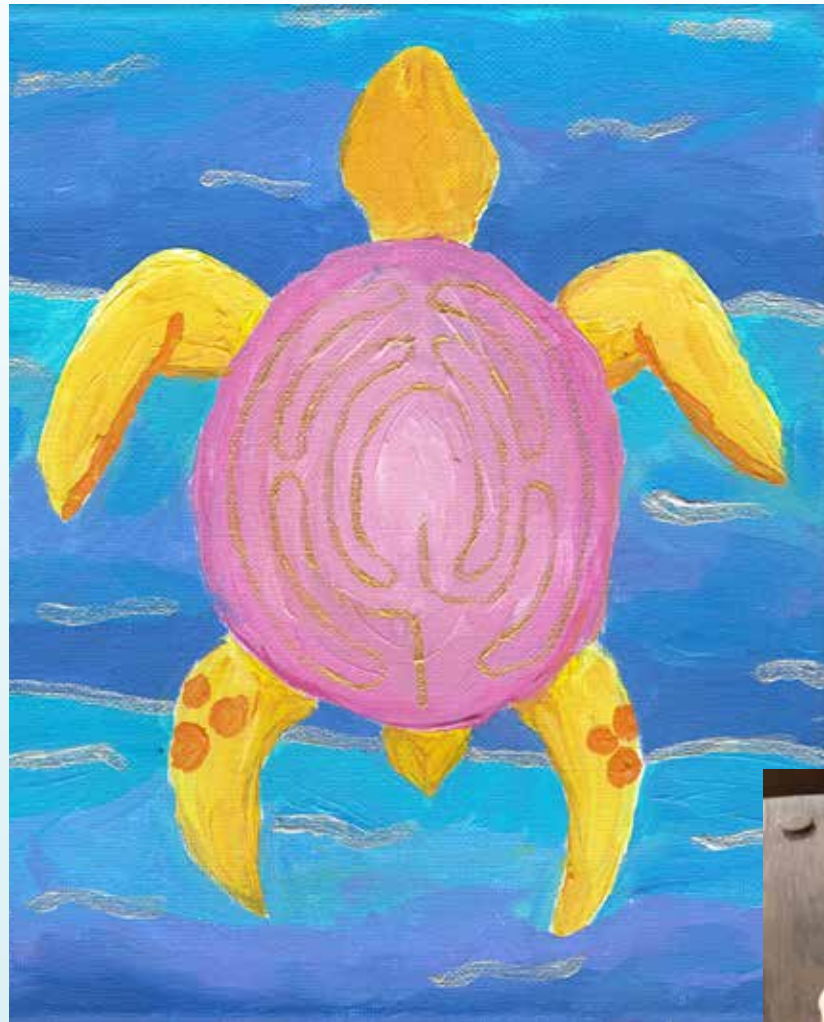


Camila Moreno-Escobar, MD

Neurology Resident
West Virginia University

I was inspired by a patient that I evaluated with rapidly progressive severe cognitive decline and I am trying to depict how with time she actually started to improve and I was able to get to know and see her vibrant personality.

THE TURTLE



Jessica Frey, MD
Neurology Resident
West Virginia University

One of my clinic patients was a retired OB nurse who told me that the family of the very first baby she helped to deliver gave her a turtle figurine as a gesture of gratitude. I continued to follow this patient for the next 3 years during my residency training and helped manage her symptoms of Parkinson's Disease (PD). Over the years I got to know her well. At the end of residency, the patient gave me a turtle (pictured above) as a thank you for taking care of her. The turtle is a fitting symbol given the bradykinesia associated with PD. However, just as in the story of the tortoise and the hare, my patient found ways to overcome her PD symptoms and live life to the fullest.

Eric Seachrist, MD

Neurology Faculty
West Virginia University

This poem describes the struggle between physician duties to treat the sick and personal risk of severe illness. Given a decreased immune system from Multiple Sclerosis treatment, I was kept away from direct patient interaction early in the COVID-19 pandemic. I stayed physically healthy but not emotionally.

The new plague is here, worst of our generation,
Ripping through hospitals, crippling nations
Providers have limits in proper protection,
More are succumbing to COVID infection

Should docs face this battle, the virus and its mauling?
Echo in my head, "More than a job, it's a calling."
It's why I'm a physician: to aid to those in harm,
A tattooed caduceus, forever on my arm

Yet while there are calls for more frontline M.D.s
Hollow and wasted seems my healthcare degree
A specialist but not special; in no way unique
I'm young and healthy except for B cells deplete
From the infusion that I take for MS
And for those lesions throughout my CNS

Sent to the bench. I am now just a sub
My colleagues fight on. I feel more like a scrub
"Use social distance!" So I hide behind walls
But to say I'll stay safe? That is not true at all
I'll still have this risk when clinics reopen
Delay the infection, that's what truth we're all hopin'
When that day comes and I'm the next viral case,
At least at that time, the ICU will have space

Missing a purpose and lacking in use
My fear wins this struggle, creating a timely excuse
But I must be honest, though ashamed to convey
From this sidelined view, I'm grateful to stay away

GRATEFUL GUILT

Gauri Pawar, MD

Neurology Faculty
West Virginia University

I am amazed at what people can achieve in spite of their physical disabilities. It took my patient with significant bradykinesia over 2 months to make this beautiful basket. I had cared for him for about 15 years and seen him worsen over time. His family made special arrangements in their garage so he could pursue his passion (carpentry) for as long as he could. I am grateful to be part of the lives of such caring and wonderful people.



THE BASKET

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Art, music, and poetry help form
CONNECTIONS

between two people, allowing thoughts, hopes, and ideas to pass from one person to another, enabling communication to occur.

Now Accepting Submissions for the
Spring 2021 edition of Synapses!

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