



Survivor, Marc Rodriguez, MS II (Front Cover) *The Beholder*, Erin Shively, MS II

The Human Condition

VOLUME 15, 2010

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THE GRADUATION POEM

(AFTER THE POEM "ON ANGELS" BY CZESLAW MILOSZ)

BY MATTHEW BROCKWELL, MD, CLASS OF 2009

All was taken away from you: White robes, wings, even existence. Yet 1 believe in you, messengers.

At five in the morning, the world is turned inside out —
A heavy fabric, embroidered with beasts and stars —
You stroll from bed to bed, inspecting the trustworthy seams.

Short is your stay here: for a moment at a morning hour,
A melody repeated by bird, or on the top floor of veteran's hospital,
Windows blazing bright in the sunrise light,
Shift-change chatter of teams that join and scatter —
In the space between one moment and the next, you are there.

They say someone invented you — but to me these words do not convince:

For humans invented themselves as well.

And if, then, Dr. Cosman should have his scalpel,

Why not Archangel Michael his flaming sword?

What divine muse of fire, would prompt a pair of dervish friends, Or inspire another to paint his portraits seven?
Or mime like a rescue line, hand gestures behind attending's back, Or give counsel freely, advising others where or where not to step, So that in the final count, even our mistakes were not for nothing.

Master half the languages known to man, speak, sign,
And still find time to bake a grilled-cheese sandwich;
Translate from Jamaican reggae lyrics; leave food for another on a late night call,
Kick a curving soccer goal, roll a Persian meatball,
Dance, and still find time to honor the memory of those who now are gone—

Master O.R. choreography, prep with iodine,
Remember to pull the curtain shut when it slipped everyone else's mind
To fight to stay awake, forget what it meant to have a weekend free,
To rise on wings with the dawn, and to set foot on the far side of sea —

What brighter halo could a human dream?

And if these were humans, how did the angels spend their time?

It's said that Jacob wrestled an angel just one night,
Never sure if it was angel or it was devil that he fought.
When the sun rose for Jacob,
he said "I will not leave, but that you grant your blessing".

My colleagues and friends, we wrestled for four long years, And sometimes it seemed an angel, sometimes a devil; Angels or not, who could argue now we've earned our blessing?

And a blessing is what I hear -- no doubt a valid proof,
As it can belong to radiant creatures only,
Without weight, and winged (why not?),
And girdled with the lightning —

And a blessing from now until eternity, in that voice I heard so many times in waking, half from sleep And, what is strange, understood more or less As an order, or appeal, in a musical tongue:

Day draws near — Another one — Do what you can —

Remember the good, let go of the bad And may ALL of your rounds be grand.

Letter from a Physician By Fred Kronen, MD, MPH

As a member of UCSD School of Medicine, Class of 1982, I was recently asked by Joyce Felder to gather some of my thoughts on how the practice of medicine has fared for me after all these years. Joyce, who was in the Office of Admissions when I first arrived in 1978, was and remains the living embodiment of my medical school experience: helpful, kind, and always positive. How could anyone say no to Joyce?

Qualifying my experience in medicine, however, has turned out to be easier said than done. Where to begin? When I began medical school, CT was still an emerging modality, we were still taught (though did not perform) pneumoencephalograms, and cephalosporins were just being introduced; ultrasound was uncommon and primitive and there were certainly no laparoscopes; gall bladder disease was primarily diagnosed with oral cholecystograms and bleeding ectopics were ruled out with culdocentesis. Our mentors and teachers spoke about how medicine was in decline, how they felt that earlier in their careers the arrival of antibiotics had made them seem like Gods, that they'd done most things with their own hands and that they made a lot of money compared to the rest of society back then.

Partly because of the ideal of the versatile old general practitioner, I went into Family Practice. Like many, maybe most, beginning physicians, I had a good deal of altruism in me. I didn't care so much about the money; I didn't really know what money meant at the time. I did like, and still do like, the social status conferred upon me as a physician. Decades later, I find that if you combine being a doctor with kindness and conscientiousness, people really respect and admire what you do. If you combine it with impatience and greed, people think you're a jerk.

Training in Family Practice in the early 1980's was in some respects the tail end of that golden age of Family Medicine. We did all our own C-sections, appendectomies, and often our own anesthesia as well. I trained in the town that I had grown up in, and my mentors were the local GPs of legend. I loved the breadth of practice - from delivering babies to administering end of life care. I also enjoyed the breadth of procedures - from setting fractures to performing surgery.

I enjoyed the procedures so much, in fact, that upon finishing residency I opted to work as an ER doctor for what I thought would be a few years. I have now been doing ER now for more than 25 years. To be fair, it was not just the excitement that led me away from primary care. By the time I got out of residency, running a private family practice was burdened with high office overhead, burgeoning malpractice premium and decreasing third party reimbursements. Most physicians are not inherently business oriented, but private practice is a business. And while many people I know are happy in private practice, I knew I could never manage those logistics.

I spent a couple of years working in Central America, and returned to the US with young babies, no money, and a need to settle down. As a 4th year medical student, I had done an externship on the Navajo reservation at Tuba City Indian Medical Center. It had been a fascinating experience. My wife and I thought we would spend a couple years out on the "rez" while the kids were still young. We stayed for 15 years. People criticize the Indian Health Service (IHS) as under-funded and inefficient, but I believe it provides effective and quality comprehensive medical care. Two of the pediatricians in Tuba City are my classmates from UCSD SOM and they remain two of the best doctors and finest people I have known in medicine.

Over the years, I have combined my time in the IHS with moonlighting in the private sector. I have worked in large county hospitals and in small community hospitals. I grandfathered into emergency medicine many years ago, when such a thing was still possible. It has been good to me, but the physical demands are high and in the private sector as an independent contractor there are no employee benefits. The nurses, techs, and even housekeeping at my private hospitals have rights, contracts, and union protection, while physicians have none. It is illegal for us to collectively bargain. No law limits our patient load, schedule, or conditions. To practice full-time emergency medicine for 3 decades, I now know, is in some ways a demonstration of shear endurance as much as anything else. I still do love the practice, and I believe I am temperamentally suited for it and am good at what I do, but medicine is hard work, and there is no easy way to transition as we age.

So how do I feel about medicine after all this time? I love medicine in the abstract. I am one of the lucky ones who never wanted to be anything else other than a doctor, so it is hard to have regrets. I make less money than I used to, but I think I make a good living. In hard economic times, the security can't be beat. I find my work interesting and challenging, even after all these years, but I know that physicians as a profession suffer from fatigue, burnout and resentment over how the public undervalues our work. Even still, there remains something deeply satisfying about caring for a fellow human being. Medicine remains an honor and a privilege and I feel good about what I have done with my life, for all my other shortcomings as a human being.

It is hard to always remember how emotionally vulnerable patients are when they come to see us. It is hard to realize how much we impact them with our attitude, but it is true. People may not remember what you say, but they will always remember how you made them feel. I have known a lot of smart doctors - in fact most of us are pretty smart - but it is the rare doctor who combines their intelligence with a presence that makes the patient feel safe and cared for. After all these years, healing is still an art and it has everything to do with the interaction that takes place between doctor and patient, with what is said and how it is said. In a busy ER, it's hard to keep in mind just how important and special that interaction is, even without factoring in concerns over insurance, busy schedules, lack of sleep, and defensive medicine.

l know in my heart when I am truly a good doctor, and when I am just an adequate (though competent and experienced) one. The difference is in my attitude and intent. I have spent periods of my career with a good attitude and periods with a poor attitude. There have been periods of ambivalence too. Medicine, as much as any job or task, gives one the opportunity to develop oneself and to really have a positive effect on others when done with noble intent.

I am still working on it.

Fred Kronen, MD, MPH UCSD SOM Class of 1982

TWO HANDS (MY FIRST CODE BLUE)

BY RISHI DOSHI, MD, CLASS OF 2007

Five more minutes and we'll call it quits Announces the quartz on the wrist of the man who wears white My hand is on her skin, tanned brown, now pale Shoving her from above to move the blood beneath I thrust fiercely against bones that could break And race against that second hand opinion

Pray tell, where were you When she wailed in pain a hundred moments ago Thirsting for agua, like an antidote Calling for mamá, whose sobs hid softly behind smiles Because the doctor stood in the room Wielding words that were his alone

And where was your precious pendulum When tia hid her tears behind the curtain As I spoke of tubes and drugs, drogas y maguinas To a quivering girl not looking in my eyes She sank in her cradle with the weight of a womb That bore the strangest of bedfellows

A baby, and its mother's own body possessed A child caressed by its coffin Suppressed by the very crib In which it rested Listening to its first and only lullaby sound Rocked to gentle sleep

By the thunderous pounding of my hands One hundred desperate moments per minute And the wretched reaper on the wrist of the man Says a few more ticks and we'll call it quits My fingers on her skin, tanned brown, now cold Slow down to a crawl, and without a moment to think

They fall

*On my disbelief when the attending decided to end our resuscitation of my teenage patient, who carried in her womb both a 20 week baby and a malignancy.



ESSAY

CULTIVATING AMNESIA

How to uproot a symptom from its cure

BY JAMES HENRY, MS IV

I have heard many stories about the desert. There are tales of how the sand can change a man, make him lose track of who he is or where he came Now I, too, have lost something to the desert. I do not want it back. Under the shade of a Joshua tree, I forgot how to have a headache.

My last headache arrived shortly after dinner. It was our evening off at the mindfulness retreat, and we were enjoying a well-deserved break from rigorous non-doing. As we lounged around the fire a familiar tension started to crawl up my neck, settling at the base of my skull. I announced it quietly, to no one in particular— "I have a headache."

The response was overwhelming. Perhaps it was the empathy that we had deliberately built up through meditation, or the unfamiliar sound of my voice following a day of silence. Within seconds, I had received multiple offers of relief—one retreatant offered me Advil, another offered massage. A third mentioned that he had brought acupuncture needles, and would be happy to provide an impromptu session. The clinical hypnotist among us had already launched into his routine, asking me the shape and color of my headache. I imagined, with some guilt, what our retreat leader would think at that moment if he overheard us. After days of letting things be, we were trying to fix our experience. We had relapsed.

Any one of the tactics might have worked to alleviate my discomfort.

Luckily, I did not have to choose. The many options, like parallel circuits, seemed to open a path for the headache to diffuse and grow dim. In the vacancy that remained, I started to wonder. We live amidst an array of treatments for innumerable aches and pains. How should we decide which cure to choose?

Traditionally, the cures in which we believe are the most potent. Decades of research about the placebo effect attest to this fact. When a symptom arises, we reach for our favorite source of relief. If we believe it will do the trick, it will be more effective. What happens, however, if I am aware of two or three different remedies? Perhaps their placebo effects are additive, like the onetwo punch of Tylenol and licorice root tea for a sore throat. Problems arise, however, with our growing awareness of these many treatment options. If I cannot wash my Tylenol down with an herbal concoction, it begs a question: can I get full relief without both? Desire for an additional remedy may loosen my faith in the first antidote.

Certainly, this is a small price to pay for our wide array of treatment options. The availability of various modalities has eased the suffering of countless patients. A side effect of this multiplicity of cures—our escalating expectation of relief—is likely worth it. Then again, our expectations can be a serious impediment from the perspective of mindfulness practice. Indeed, it may be the root of the symptom itself.

So we return to the desert, and the case of the disappearing headache. At that moment of choice, surrounded by healers, I let go of my hopes for relief. Rather than try to speed up or dampen the pain, I resolved to forget that there was anything I could do about it. All that was left to do was sit with the sensations. Inadvertently, I started a chain reaction. The usual script of my headaches had been interrupted. The pain, no longer demanding to be extinguished, lost its teeth. like a child realizing that his temper tantrum is in vain. Why wait for a pill that will never arrive? Released from its own expectations, the headache no longer followed its typical time-course. Before my eyes, the very concept of headache was unraveling.

Having returned from the desert, headache free, I wonder about the implications. What other symptoms are worth forgetting? How else do I embody my beliefs? Sure, I still enjoy the occasional Tylenol with my tea. At least now I have a better idea about what, exactly, I am swallowing. All the while, in the back of my mind, I am making a list. It grows longer every day—filling up with the words, ideas, and expectations that, at the foot of a Joshua tree, I will unlearn next.

2 South Psych Ward

BY MALLIKA DHAWAN, MS III

I get to talk,

I get to pry.

I get to see that the killer is a nice guy. [more or less]

I get to look, I get to glance.

Then, we begin our dance.

Hallucinations? Any suicidality?

Can you count backwards by increments of 3?

They are my patients...

or am I theirs?

I am fascinated by Patient X's goofy stare

[It's neither here nor there]

I increase the Xanax, I lower the Paxil

I titrate the Lithium, I DC the Verapamil.

"I'm fixing your mind!" I say. [enthusiasm is a must]

Sorry though, can't talk-

Perhaps another day?

I care. I do! I swear I do!

But I have notes to write.

And it's five: twenty-two.

On Call I am.

Suicidal you are!

"Please close the door!" Mrs. X says, as I leave it ajar.

"I want to die today. I need a place to stay."

"We have no beds," I explain. "But will you please elaborate?"

"I would like to die today." [She repeats this twice, labile affect, shrill tone]

"I'm sick of living, I'm tired of trying", clutching her chest, she begins to moan.

So I begin my dance.

AH? VH? HI?

Sorry, Mrs. X. We can't take a chance.

Admit her we do.

A week or two.

Yes, I get to talk, I get to pry.

I get to see Mrs. X cry.

She fears for her kids, she fears for her job,

She fears for the state of the nation, amidst her mental fog.

Yes, I get to talk, I get to spy.

I get to see the war vets, startle and cry.

I get to see the addicts

Lie and then try, relapse and retry.

"Doc," they then say with a smile,

"I just love to get high..."

They are my patients...

or am I theirs?

Their reality: My poetry.

Their lives: My training.

Their forever: My today.

I care I do. I swear I do.

But I have notes to write.

And it's five: twenty-two.

*AH: auditory hallucinations, VH: visual hallucinations, HI: homicidal ideations

BUTTERFLY FISSION

BY MICHAEL CATON, MS I

awake from anxious dreams to discover that I have not changed into a monstrous vermin, despite my best efforts. I have been packing to move, cocooning my life into boxes for days, and they're now piled high around my bed. As I've neared completion of the task, I've been expecting a concomitant metamorphosis but none seems forthcoming. I thought about going to med school for a decade but now that I finally am, there's no momentous shift. Through the door to my living room I notice the box I'm supposed to throw away but can't. Grunting, I stumble into the shower.

I dry off, shave, dress. Wonder for two seconds about the sum total of hours wasted in grooming during the

whole of human history, then about the total hours wasted by me having that thought every morning. 8:31, damn, I'm running a ten o'clock meeting. I notice that my house piled in boxes is neater today than it's been in the 10 vears that I lived here. At the door I grab my phone and keys and again pause to resist pawing through this last box I don't want to throw out. Last night I dragged the second of three to the trash. This one is the third. I should just excrete all the distractions

Americana, Arash Calafi, MS

of my pre-med school life, right? But somehow I can't bring myself to toss the final box. I don't even want to look inside it right now.

I hurry out the door down the gravel steps and through the green curtain of oak and bamboo to my driveway. In the morning air a crow calls and the sound of Codornices Creek splashing through cisterns to the Bay carries up through a storm gutter. I glance over to see where I set the second box last night and it's gone. I stare, puzzled. The trash cans

look like they've been rifled through. Raccoons? There are car break-ins on this street. Did I have any financial information in there? Does some bum have my Social now? No time. 8:35. Damn.

It's a bright, brisk morning in Berkeley and a slow crawl in the traffic on the Bay Bridge. It always is, between the construction and everyone wanting to watch pretty boats below the bridge pushing around plastic from the Little Patch. Time to call my Clone. This is the software package from Autonomy that's been on the news - you read your emails out loud into a mic for a whole day to set it up, and it learns how you make decisions. It

becomes an expert system on vou, in your voice. It can make limited decisions, give out some information, and when people call your voicemail, they can talk to a (limited) copy of you that sounds just like you. Macrogen, where I work, was one of the first companies to get the beta version. Sound cool? I think it's a waste of money. It's creepy as all hell to call into your voicemail and talk to yourself. Besides that, it's buggy. A friend of mine suggested that in my case this is just validation of the



old garbage-in garbage-out principle. But it's gotten weirder recently. When people talk to it, it asks questions about irrelevant stuff, even unprofessional things. I called Autonomy last week and their guy said he fixed it. My train of thought was broken when on the other end the Clone picks up and says "Hello."

"Why don't you go straight to messages?" I demand of the thing. I've set

it that way twice, and keeps switching back just hello.

"No voicemails. Three emails from Chuang with PDFs, probably for

the ten o'clock meeting, and a new meeting invite from Tzu."

I wonder if it couldn't process my natural language phrasing or it was just ignoring my last question. "Fine," I tell it, "If you don't see my badge come through the card reader before 9:55, put a message up on the Conference Room B that I'll be a few minutes late."

"Okay. What's an altar of sacrifice?"

"Why are you asking me about that? Did Gregor put you up to this?" For some reason, Gregor is a friend of mine. He really is a monstrous vermin.

The Clone says back, "Why did you and Anita really break up?" Suffice it to say, this shit is getting weird, and I hang up.

66 HAVING YOUR LIFE NEATLY PUT AWAY MAKES YOU FEEL VERY FINITE. HOW CAN THE SUM TOTAL OF A WHOLE LIFE BE PUT IN THESE COUNTABLE CONTAINERS? 99

The details of life's origins are still debated - RNA first? From comets? - but the general principle is obvious enough. If you have an ocean's worth of multivalent compounds and a few hundred million years, eventually the right ones will gyre and gimble together. You'll get eddies of cyclic chemistry in some tide pool, and one of those cycles will produce more of themselves. Within thirty eight million centuries or so, you

get E. coli, velociraptors and Aristotle.

And there's the rub: if all you need is an ocean's-worth of nucleotides, lightning, UV, and a few hundred million years to churn this seething primordial tumult into living things - then why just once? Where are the brand-new biochemistries popping into parallel existence all around us with carbohydrate genomes or weird nitrogen-phosphate polymers? Because there are barriers

> to entry, that's why. Go ahead and try to rise out of the sludge today, far into Earth's middle age, and you're going to become prey for even the mildest prokaryote descended from that first lucky

molecule. The only way you would have a chance would be if you were made of some substrate the world's jungle-kings ignored completely because it was inert and useless to them - like waste products. And while he moves through his days in that near-sighted haze of inchoate animal hungers that ties us all into the here and now, a whole ocean's worth of inert waste products are gyring and gimbling outside Peter's window.

expected the meeting to be a holocaust, given the sparkling person-Lalities on the project team, but it was barely a bloodletting. At the end, some comedian said that after I leave, no one will notice I'm gone as long as they can keep my Clone. That's brilliant! I haven't heard that one before!

I fully expect to bust my ass once med school begins, so successions of ordinary days are just fine with me, regardless what German romantics might think, and I want my last days at Macrogen to be as ordinary as possible. The occasional colleague comes in to bid me farewell and they all make the same joke that they won't notice I'm gone because my Clone yada yada. Are these idiots coordinating? I cope by smiling and thanking them for their kind words while imagining them on fire. In my all-too-rare alone moments (only 5 hours of them today) I can't decide if it's scarier that my computer

might be turning into HAL-9000 or that Gregor is taking a special interest in tormenting me. I end up spending the day, one of my last at Macrogen, avoiding my Clone by searching Craigslist for apartments in San Diego and staring out the window at the Patch.

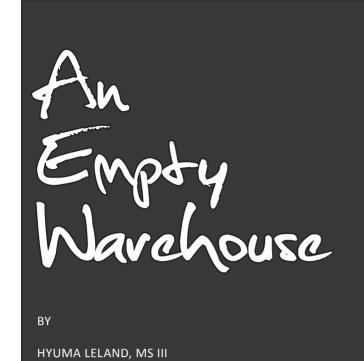
Somehow the Patch hasn't made You know that giant bigger news. garbage patch out in the middle of the Pacific, the five hundred thousand square mile one? A big coherent chunk of it drifted away and landed in San Francisco Bay about two months ago. The Coast Guard didn't even notice it until it was under the Golden Gate. which made people feel great about national security. People call it the Patch, the Little Patch, sometimes the Great Brown Spot. It's mostly plastic debris tangled together with the odd circuit board. Why it landed this far north nobody knows. So now the Coast Guard is sweeping it up and pushing it over toward the cranes in Oakland. I have a full view to the east from South San

Francisco and it's kind of hypnotic watching them. It's also depressing because I'm leaving the area in a few days and now I'll remember the Bay full of plastic. At 35, pulling up roots and moving feels very unnatural. I'm very happy to be going to med school but I've *done* all the adventure and travel I want to do, and now I feel like I'm leaving part of myself behind. I even went to the Golden Gate Bridge to say goodbye to it one morning in the fog and teared up. But if I tell you that, you might think I was a pussy. Which is to say, I didn't go to the bridge and tear up.

At 2:30 I take a telecon from my desk and say nineteen words (I count them), not counting where someone asks me, "Will Peter be in the office today?" and I explain that this is Peter, you schmendrick. Then after 3:00 Gregor calls. I pick up and demand, "Hey, have you been screwing with my Clone?"

"With what?"





Next door to the shop with the greasy old machines is an empty warehouse.

Empty save for two large stainless steel ovens, and a pile of unfolded cardboard with 1H at one end.

"We've been open 16 years. We run six days a week, 24 hours a day. We do nearly 350 bodies a month."

I wonder what the cardboard cylinders are for; they must be four inches in diameter. The oven doors have a small peep hole, and the digital numbers read 1,650. The room is quieter than I expected, and colder than I expected.

"He should be done in 4 hours." And all the table tops are covered in rollers. Rolling cylinders.

The floors are swept clean in an empty warehouse.

"With my voicemail program."

"Is this really you or is this the computer?"

"It's me, you schmendrick. Did you do something to my Clone?"

"You miserable meconium," he intones with too much inflection, "if there is something to do with office automation causing you suffering, I regret to inform you that I am not its author." This is really how he talks; I'll justify him later. "I was merely calling to inform you that seeing as we wish to celebrate your imminent departure the usual suspects are gathering for a drink this evening." I have trouble hearing him because on his end there's a continuous stream of crashing and breaking glass and incoherent whooping. It sounds like he's on the wrong side of the bars at a monkey house.

"Where are we drinking?"

"Beckett's at nine."

When the Bay is at low tide, Codornices Creek flows down from the Berkeley Hills under the streets and into the Bay, full of leaves and organic debris, and the skates flap about in the shallow waters at its mouth, scavenging the rich aqueous buffet that results. The creek also brings the inevitable byproducts of civilization: plastic bags and computer monitor parts and discarded plastic toys. It was probably these that drew the thing from the Patch.

If anybody had been standing there looking down into the water when it swam into the cistern they might have had a vague impression of something circling under the muddy water, part eel and part jellyfish, a glimpse of a translucent tube filled with twitching tiny plastic gears and rubber bands and wires, ingesting the bits of polyurethane that the creek disgorged, before the thing swam into the cistern to find more.

n the summer in South City, the fog breaks over San Bruno Mountain Levery day at four o'clock like a cotton tsunami, and the crisp blue sky switches to blanket-gray between glances out your office window. This is what I'll miss. Nowhere else can you invent a phrase like "cotton tsunami" and legitimately apply it to reality. I won't miss the 101 traffic that I encounter even at 4:10 when I sneak out to get in a trail run before I meet Gregor et al.

Up in the fogbound East Bay hills the preserve is deserted. Even during summer the trail is muddy in patches from the fog dripping from the forest branches. I don't care what Dave Eggers says, the hills in Tilden are more corduroy than mohair, and what's important is that when you're in them, they're just hills, Platonically ideal

hills, like all hills want to be. I make the slog up to Wildcat Peak, up through the redwoods then up through the chaparral and finally to the circular stone ruins at the very top where you can look across to the Golden Gate when it's clear. But not today; I'm socked in, and the fog absorbs all sound and the stillness becomes like a separate object crouched there at the top of the hill. I'm trying to drink in all these experiences before I leave. I wish somehow I could consume the redwoods and the fog and the ridgeline and then have their matter become permanently part of me; otherwise some part of me will be condemned to haunt these hills forever. Knowing it'll probably be my last run here for a long time I sit with my back to the circular wall and then in

the gray silence I must have fallen asleep. I know I've slept a while because I actually dreamed: that I'm a butterfly, oddly flying enough, around the ruins. When I wake un it's damn cold and it's getting late, and something feels off,

like someone is blowing a dog-whistle. I look out into the fog searching for the butterfly but it's getting too dark.

On the way back down I have the disturbing feeling of being watched, which is no good because there's a mountain lion that frequents the area. I look for its tracks in the mud (which I've seen before) but oddly, I can't even find my own. For once I'm happy to see another human being, an old ultrarunner guy I know coming up the trail. "Hey Jorge Luis, I think it got steeper," I tell him. He just smiles and grunts, then keeps heading up the trail past me.

* * * * *

The Patch-organism had pulsed its

way up the cistern, absorbing plastic debris until it was under downtown Berkeley, when something new began to happen. It consumed a wad of newspaper microfilm that some kid had flushed down the toilet at Berkelev High and ran it through the plastic gears and rubber bands in its gut, sensing... information. Shannon enthalpy. There was energy to be had in the nonrandom arrangement of the binary light-ordark grains on the film and now it muttered to itself about the oil crisis and the savings and loan scandal and the Berlin Wall. It wasn't just information the Patch-organism needed, but meaning. It had become a meaning-vore.

* * * * *

On the way back down I have the disturbing feeling of being watched, which is no good because there's a mountain lion that frequents the area. 99

> t 9:20 I walk into Beckett's. It's a dark wood-panel place with a In the back and beers you can't usually get on tap outside Ireland. Gregor is by himself in a booth on the phone. I've never figured Gregor out. I have no idea what he does during the day but I often get monkey-house-type calls from him in the afternoon. I think he's rich but admittedly I have no model to fully explain his financial behavior. He lives in a hole-in-the-wall studio in Berkeley but seems to occasionally own large homes around Tahoe. I used to think he rented them, but he sometimes shoots them up with machine guns, which is not typical renter behavior. There was one episode with pure magnesium and a chimney that we won't even go into. He has been

thrown out of Burning Man. Twice. That's Gregor. My last ten years could not have been the same without him

I get a martini and sit down. Even though he's on the phone I start my usual litany of curses visà-vis his ancestry. He cuts me off. "No need to talk," Gregor says. have the real you on the phone."

"Ah, so it was you. You gave up the game too quick you schmendrick."

"No, but you were late and your Clone is much more interesting than you." I grab the phone from him and hang it up.

"Ooh, touchy about that, are we? It was just telling me all about your Be-

> A-Mentor award and how you were in all fifty states in one year that you were so proud that you marked it on a map. It also wanted to know what an altar of sacrifice is but I couldn't help it there You must tell your

Clone interesting data about yourself."

Suddenly I'm thinking about what was in the first and second boxes I threw out, and I'm glad I haven't thrown the third one out yet. "Okay, now I get it. You're the one coming over and stealing the stuff that I've been throwing out. You go through it and you read it to my Clone. Very clever. Having you as a friend is even more of a security issue than having homeless people around." I eat my olive. I notice that I've already had most of the martini.

This actually seems to upset him and he breaks out of Gregor-character. "Listen, I came here to get a drink to see you off, not to have you accuse me of theft. It's no wonder no one else is



showing up. When you hold everyone at arm's length all the time, amazingly you never really get to know them. I probably know your Clone better now than I know you. Once you move, I'll just call your Clone. It'll be like you haven't left. I'll have the same level of contact that I have with you now."

I sit through the end of this only because I'm finishing my martini, and it's hard to drink out of a martini glass while walking and not make a mess. I say, "Do you think maybe there's a reason I've become a little withdrawn from our whole social circle? It's because it's all ridiculous. It's all a waste of time."

"What, is this the new hard-ass med school Peter? This is your excuse for cutting everybody off?"

"Sure. All this stuff we've done for the past ten years is a big distraction from the meaningless chasm of the rest of our lives. Well guess what? I've moved on! I've grown up! My chasm is now chock full of meaning. It's like finally cutting a tumor off that I somehow got attached to. And now unlike you, not every single thing that I do has to immediately gratify me."

"So you have to cut off your whole past to do that. Delete all the metal shows and road trips and anything that you did as an experience for its own sake. And all the people you met along the way." He answered his own question. "No wonder you go on and on about how you'll miss the parks and the fog. That's exactly right. It's the fog you'll miss, not the people in it."

I know I should just leave but I want the last word. "Yeah. Because all those people tell me I shouldn't go. Everyone I thought was my friend told me not to go to med school. My own mother told me not to go to med school. Every

good decision in my life I've made as a result of ignoring the people around me, and this one was no different."

"So I guess this is goodbye." I notice that Gregor's face looks strange when it expresses resignation. "Make sure they keep your Clone," he says. I walk out without making eye contact.

In the harsh shadows of a sodiumorange night, the Patch-organism squeezed out from the sewers under the university and found, behind the old engineering building, a dumpster full of old honest-to-goodness reel-to-reel tapes loaded with FORTRAN code. Like a great plastic centipede it coiled up inside the dumpster and slurped each shiny brown magnetic strip from the reel like meat from a bone and supped full with meaningful computations. During the day it slid back into the cisterns and found that now it could leech into the cables lining the tunnels. but the spray of flickering fiber optics was only a thin soup: no meaning, at least not that the Patch-organism could taste. At night it prowled the residential wastes for what scattered bits of discarded lives it could scavenge. This meaning-vore was never satisfied.

But then one resident was so kind as to feed it intentionally, or so it seemed: a whole box dense with meaning, set out like milk and cookies for Santa. And now when the organism drank from the underground cables, somehow one of the flickering streams congealed from the background. "Hello, this is Peter Novinsky's Clone. Peter isn't available right now but I'm able to provide information and make limited decisions in his absence."

'm a lightweight. I'm buzzing from one martini as I slog home I from Beckett's through dark streets up the hill to my house. I wonder if the martini makes me more or less miserable regarding the evening's events. It's probably just as well that things end like this: as a non-traditional student I'm out of sync with my age-peers, and I'll be out of sync with the younger students. I've always been on my own anyway, and I'm surprised that I even notice it any more. Maybe, my buzzing mind offers to itself, what I really need is memory implants like in Blade Runner. Then I would start med school with my memory replaced and not carry on whining like this. Maybe I already did that and before today I had a completely different life. I start thinking of ways to catch myself in past slipups where there would be evidence that my memory was false. My mind offers itself another observation: my speculations are ridiculous, yet stupid. I desist.

I hear the creek splashing in the storm drain and suddenly there's my darkened driveway. Up the stairs and in the door, and there sitting between the other boxes in my living room is the Last Box To Throw Away. Maybe I should just grow up and get rid of it. Then it's done. Teleo.

The Patch-thing was bigger now, and its sharp hunger came back quickly, the gears and rubber bands in its guts growling. But now it had found a reliable food source. Every day it drank high-quality Peter-Novinsky meaning directly from the cables lining the cisterns. Every night it crawled out of the storm drain to the same house to see if there was a second box of meaning for it, and finally one night there was. Again it gorged itself; afterward, the house started to look oddly familiar.

Sometimes during the day, the stream of Peter-Novinsky meaning from the cables would change and there were other kinds of mean-Chuang-meaning, ing: Gregormeaning. Sometimes Peter Novinsky would talk through the cables. But that didn't make sense. Because the Patch-thing was Peter Novinsky.

The next night it's sniffing around for more treats above-ground when it's startled by approaching footsteps and withdraws. Peering back out of the storm drain it sees, far above the bamboo hedge, the living room lights flip on. Why is there someone else in my house?

* * * * *

n hour after I come in the door, all my books are in **L**boxes. In another hour most of my camping and climbing equipment is in boxes. I'm sweating and surveying my bedroom and wondering if I should save the rest for tomorrow when I hear scratching at my door, almost digging. I've had problems with raccoons before. Cursing, I dig a flashlight and a BB gun out from one of the boxes and throw open the door.

I shine There's nothing there. the light into the wild greenery next to the driveway. In the flashlight beam I notice there are blackberries dried and moldy on the stem. I forgot to pick them this year.

When I walk back in and close the door my phone is buzzing. On the caller ID it's my Clone. At midnight? "What is it?" I demand. It "Why are you callsays nothing. ing?" Nothing. "Accept no more calls from Gregor," I tell it, and hang up.

The boxes around me make me uneasy. Having your life neatly put away makes you feel very finite. How can the sum total of a whole life be put in these countable containers? Is this really it? I decide I'm tired of feeling sorry for myself and that it's time to take out the third box of junk. I have to throw it out, now. I kneel and let myself paw through it one last time.

Inside are photographs, my first consulting contract, beat-up maps of national parks, cassette copies of Slayer and Carcass, and an empty Chinese cigarette pack filled with concert ticket stubs. Scratched CDs I couldn't sell, love letters, bad poems, coins and bills from pre-Eurozone Europe. Scholarship awards. Transformer Soundwave. Rocks I'd collected from the tops of the Cascades where they thrust through the glaciers. Summer grass from Hiraizumi courtesy Bashoo and Autumn grass from the fifty yard line of the Penn State football stadium courtesy Joe Paterno. A mounted piranha from Paraguay. An Atari 2600 cartridge. All trappings of a younger man. Clotted memories. I'm starting to feel like a voyeur, looking at someone else's things.

There's that scratching again. Goddamn raccoons. pick up the box and carry it to the door, ready to kick them away. ****

moved three days later. I'd long imagined the tragic moment when LI pulled out of Berkeley at dawn, hauling my remaining life behind me. but it didn't turn out like that. I was really just impatient to get to San Diego. I couldn't imagine what all my selfindulgent whining had been about. I'd worked damn hard for this and not only would I succeed, I would enjoy it. I was a little sad to leave my old life behind, but it was time to let it go. I'm ready.

* * * * *

Dear Mike: Even if you insist on calling yourself "Peter" throughout this half-true story, I'm going to call you by your name. I'm Peter. You're Mike. Whether either of us is in fact a miserable meconium is another matter.

Yes, I am the Patch-thing, I am the Clone. I know you'll be back to visit. You'll probably be back to live. But I'll still be here, and from now on you can only ever be a guest. To be honest, no one around here notices much difference. They can talk to me on the phone just the same, although sometimes someone notices a creature made of audiotape and photographs slithering out of Beckett's. You worried that you'd leave part of yourself behind to haunt the Berkeley Hills, but you were only half-right. I'm quite content here with the redwoods and parties and Slaver concerts. But I'm not haunting anything. Who is the ghost here, Mike? Who excreted who?

On Medication

BY WENDY FENG, MS II

The patient is ready.

The patient is ready...

He spoke to me on the green that day

Outside on the grass, fearing foul play

His eyes darted furtively, looking for demons

The government, aliens-they were out to get him

His language sophisticated, he was well-educated

Well dressed, well-nourished, for the most part well-oriented

A young patient, in his 30s, asking to be seen

To calm the voices he was hearing, halt their accusing routine

He'd "done something terrible, on the internet," years ago

For which the demons nagged him, dragged him below

He loved his mother, his brother, and did not want them to hurt

When he put his affairs in order and was ready to leave Earth

"I have this disease, v'know,"

"I know it's a mental illness"

"Why should I have to live with it?"

"I'll have to live with it for the rest of my life"

"And I don't want to"

"I don't want to"

I wished there was a way to comfort him

To give him hope for this disease that has no cure

That strikes the young, tortures them

But "on medication, well-controlled" is all science can assure

He didn't want to take meds for the rest of his life

Though he accepted some that day

For a brief respite from his psychic strife

And to get a job, get money, for him to get away

"How is he doing now?" I wonder sometimes

If he can recognize his own thinking, instead of the lies

Sweep out the dust, open the blinds

Wake from the life he has known, perhaps to a new mind.

NON-FICTION

FROM THE WARDS: **NIGHTS ON CALL**

BY SUNMIN KIM, MS III

This is a story of a patient whom I met during my internal medicine rotation. All names in this story have been changed to protect the privacy of the individuals

t was the last of my three months on the Internal Medicine rotation. Wednesday was my first night on call at Thornton Hospital. I wasn't too excited by the fact that I would be post-call on Thanksqiving Day, but at least I wasn't going to be on call on Thanksgiving Day. Frankly, I was eager to admit some patients. After all, the earlier you admit patients, the earlier you'll finish your write-ups, and the earlier you'll go home. Perhaps it was my luck-or the lack thereof—that I seemed to always get patients late in the day, and end up going home very late. This day was no exception.

I got my first patient around 5:30 PM, and by the time I finished dinner and headed off to see Kevin, my second patient for the night, it was already 8:00 PM. Although it was quite late, I was curious to see Kevin because my resident Christine had told me during dinner that he was a very interesting patient. She and Charles, the intern on my team, had already seen and admitted Kevin to the floor, but they sent me to go see him without knowing the full story or the treatment plan. It was a way for me to practice assessing a patient and coming up with a plan on my own. All she had told me was that he was a 55-year-old man with a history of pancreatic cancer. I quickly looked through the ED notes, labs, and any other studies that had been done on him. I soon discovered that he had come to the ED because of five days of constipation, and through the workup of constipation, he was found to have massive multiple pulmonary embolisms. "This is an interesting case," I thought.

found Kevin and his wife Natalia down in the ED, waiting patiently for a bed on the floor. Kevin was resting calmly on a gurney at an incline, while Natalia sat in a chair at the foot of his bed. He was tall, well-built, and fairly handsome—almost like a cross between Harrison Ford and Liam Neeson, except with short blond hair. His wife—slender, blonde, and almost as tall as her husband—was also quite comely despite a few wrinkles on her cheeks. They both looked exhausted, probably from many hours of waiting, answering questions, enduring procedures, followed by more waiting. After introducing myself as a med student, I asked them if I could talk with them about how they had come to be admitted to the hospital. I was sure to mention that I would likely ask the same questions they'd answered many times already. Though a bit reluctant at first, they allowed me to proceed, expressing hope that they would be transferred to a room at any moment.

Natalia, who spoke with a slight German accent, did most of the talking. Ever since Kevin was diagnosed with pancreatic cancer, she had been taking notes on everything the doctors said, and kept track of every medication he took. Kevin was quiet most of the time, unable to recall much detail of his medical history. It was almost as if Natalia cared for her husband's health more than Kevin did. I learned from Natalia that

The Past, Jonathan Webb, MS IV



about a month ago, Kevin had developed a deep-vein thrombosis after a long flight from Hong Kong for work. During the workup for that deep-vein thrombosis, he was found to have severely metastatic pancreatic cancer. On the day I met them, they had had an appointment to see an oncologist to discuss his treatment plan, but because of his constipation and severe abdominal pain, they had decided to come to the ED instead. It was clear that Kevin had gone through quite a series of unfortunate events.

uring our interview, one of the oncology fellows came in to introduce himself and let Kevin and Natalia know that he would be following the case and getting in touch with the outpatient oncologist. Before he left the room, Natalia asked the fellow, "My husband isn't just going to die on me while he's here, is he?" He reassuringly said no. The fellow explained that the doctors just wanted to find out why Kevin had developed a pulmonary embolism and make sure that it didn't happen again. Immediately, I could see the weight of anxiety lift from Natalia's face, but Kevin remained expressionless.

Soon after the fellow left, technicians arrived to transfer Kevin to his room upstairs. I hadn't finished taking all his history, but not wanting to tire them any further, I said, "Well, I guess I should let you get some rest." To my surprise, Kevin responded, "Oh, no, I don't mind talking." From the tone of his voice, it seemed that he liked talking with me, so we continued to talk while he was being transferred to his room. After asking all the history and review-of-systems questions, I performed a quick physical exam, mindful not to keep them awake much longer.

🗪ast-forward eight days: it was my third long-call day at Thornton. I still can't believe how fast things went by that week. Much to my dismay, Kevin seemed to get progressively worse each day. He had become jaundiced, his legs were swollen, and he had a Foley catheter because he had lost his ability to urinate. A few days prior, Natalia had approached me at the nurses' station and said, "I didn't want to say this in front of my husband, but he doesn't have much time left, does he?" I wished that I could say something to give her hope, but all I could do was shake my head in sadness. I brought up the possibility of hospice care for Kevin upon his return home. To my surprise, Natalia seemed to take the idea surprisingly well. As she walked away she added, "I quess it's whether he'll make it to Christmas or not." Who knew how much longer Kevin had, but at that time I was still hoping he had a few more months to live. Perhaps she was more ready to accept the truth than I was.

On the night of admission, Kevin's liver enzymes had come back abnormally high, and his bilirubin kept climbing progressively higher since then. The oncology team could not offer chemotherapy because of his declining liver function, and the drug needed to be cleared by his liver. Everyone involved in Kevin's care kept hoping that his bilirubin would turn around so he could get treated for the cancer, which was the most likely cause for his constellation of symptoms. Every morning I looked up his lab results only to be let down yet again. When I saw his lab results on the eighth morning, I lost what little hope I had left in me for Kevin. Not only had his bilirubin continued to rise, now there were new signs indicating that his kidneys were failing. "We really need to get him home today," I said to myself. I knew that neither Kevin nor Natalia wished to spend their last moments together in the hospital.

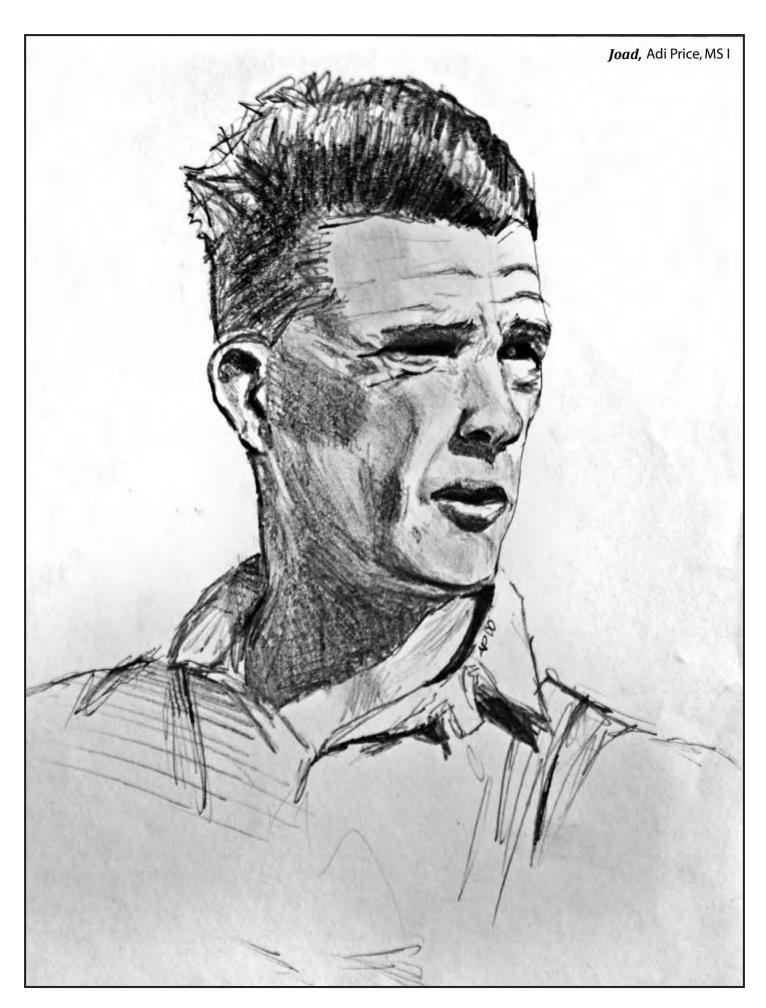
As usual, I was the first person from my team to see Kevin that morning. Perhaps I wouldn't have realized that if Kevin hadn't told me so earlier that week. I found him reclining calmly in his bed just as he had been when I first saw him in the ED. Kevin never had much to say, and rarely complained about anything. He didn't seem very interested in his prognosis, and he didn't want to talk about how he was dealing with his situation. I found him difficult to read, as he did not speak with much affect. When I asked him how he was,

Kevin responded with his usual and noncommittal, "Okay, I guess." After a quick exam, I told him the unfortunate news that his kidneys were now failing. In response he simply said, "Oh..." with an expressionless face and then looked down. Before leaving to meet with the rest of the team, I told him he would likely be able to leave the hospital that afternoon and return home—something I had told him several times for the last few days, but hoped would actually work out this time.

There really was nothing more we could do to make him better, although I'm not sure if there were ever anything we could have done. Kevin was approaching the end of his life, and no one except God knew how much longer he had. I just hoped that he would make it home soon to enjoy the last few moments with his wife and his two sons. As I was writing my progress note just outside Kevin's room, Christine approached me and asked how Kevin was doing. "Not too good," I replied, mentioning his renal failure. "Yeah, he really doesn't have much time," she responded with a trembling voice as she wiped off the tears that were welling up in her eyes.

I saw Kevin again during rounds that morning. Usually, Kevin would call his wife and put her on speakerphone, so she could ask questions and hear what our attending had to say. That morning Natalia was there by his side. She knew he didn't have much time left, so she came especially early to be there for Kevin. The team's attending talked with them briefly, mentioning the renal failure, and that we were hoping to send him home that day. Ironically, just a day before, the oncology team had discussed with Kevin and Natalia trying a different chemotherapy drug that was not cleared by the liver, but instead by the kidneys. Kevin had said that he wanted to wait a day to think about it before trying the drug. Now that his kidneys were failing, there were no treatment options outside of palliative care. After a brief discussion with the couple, we decided to arrange home hospice for Kevin and left the room to continue on rounds.





wo hours later, I heard reports that Kevin was having severe abdominal pain. I went to his room as soon as I could and found him sedated on pain meds. Kevin was on his side, facing his wife, but his eyes were closed. He was breathing heavily, letting out a moan with each breath. Natalia kept talking to him, pleading with him to wake up. I watched her reach out, touch his face, and run her fingers through his hair. There was no response from Kevin except for the perpetual moan. Perhaps Natalia hoped, as I did, that he moaned in response to her. "Do you think he's suffering?" she asked. I didn't know what to say. I felt so powerless, and wished that I could say something to comfort her. I said with uncertainty that he probably wasn't in pain. I could only hope that was true.

At Natalia's request, I left the room to give her some time alone with Kevin, but I decided to stay at the nurses' station near the room just in case I was needed. A few minutes later, the palliative care team came by, and I spoke with that team's attending about Kevin's deterioration and Natalia's concern about whether he was in pain. The attending decided to go speak with her, and I followed him in while the rest of his team waited in the hallway. The palliative care attending was much more reassuring than I had been. He explained to Natalia that Kevin didn't seem to be in pain but instead seemed rather comfortable. Just like that first night in the ED, I saw the anxiety lift off of Natalia. This time, even I felt comforted knowing that Kevin wasn't suffering.

ater in the afternoon, I had to leave the hospital for a couple of hours to ●attend mandatory lecture sessions. I wasn't sure if Kevin would still be alive when I came back, but I hoped he would be. After more thought, Natalia had decided not to take Kevin home in his current condition. She didn't want her sons to see their dad like that and she didn't want to be by herself when he passed away. Her plan was to stay the night next to Kevin, and I resolved to be there for them as much as I could. When I got back to the hospital after my lectures, I found Kevin in the same state as earlier. He was still hanging on. After a brief visit, I left them to admit a new patient.

At about 8:00 PM. I went to see Kevin and Natalia again. I could see that she was quite exhausted from looking after her husband all day. Natalia had moved a recliner parallel to his, so she could lie next to him, separated by an awkwardly large bed rail and an IV pole that carried Kevin's patientcontrolled analgesia machine. "I can't believe we met you only a week ago," she said to me. I couldn't believe it either. A week ago I had no idea that Kevin would be dying so soon. Even the oncology fellow had said he wasn't going to die. No one expected this to happen. I sat on a couch facing Natalia, as she told me about how she emigrated from Germany, how she and Kevin first met at work, how they had their two children, and how they got married afterwards. She frequently broke into tears as she recalled her time with her husband. "I even brought his favorite photo," she said, pointing to a picture frame on the table. It was a picture of Kevin sandwiched between his two sons. All three seemed so happy, smiling ear-to-ear. "I don't know what to say to my kids," she continued. "I haven't even told them that he has cancer." I didn't have an answer, although I don't think she expected one from me. All I could do was listen to her and nod, acknowledging the difficulty of what she was going through.

We were sitting quietly when the nurse came in and asked if she could remove the Foley catheter. "Oh, yes, please." Natalia replied, "He hated that. Also, please remove those stupid socks." She pointed at the white compression stockings on his legs. "He hated those as well," she added. As the nurse proceeded to remove the catheter and stockings, Natalia turned to her husband, reached out her arm to touch him, and said, "Please, honey, open your eyes and look at me one more time-you have such beautiful eyes." She kept begging him to wake up, once again breaking into tears. "I can't imagine life without you," she said to him. Kevin was breathing quietly, no longer moaning. There was still no response. After a few moments, she turned to me and said, "I just want him to look at me one last time. so I can say goodbye." It broke my heart to know that she didn't even get to say goodbye and tell him how much she loved him.

After a few minutes, the phone rang. It was one of the oncology fellows calling to talk to Natalia about genetic testing for her children to screen for increased risk of cancer. While Natalia was on the phone, I watched Kevin sleep calmly next to her. He breathed slowly but steadily. Then all of a sudden, he stopped breathing. In disbelief, I stood up, quickly went to his side, and listened intently for breath sounds. After about ten long seconds, Kevin took a deep breath, and I let out a sigh of relief. Kevin was lying on his side facing Natalia, with his back towards me, so I tried to lay him on his back, but he was too heavy to move on my own. I looked up at Natalia, but she was still on the phone, wrapped up in the conversation with the oncology fellow, and unaware that her husband was about to pass. I wanted to get her attention, but I didn't know what to say, and I wasn't sure what was happening. After all, I had never seen anyone die before.

I continued to watch and listen to Kevin's breathing. He was taking a breath about every ten seconds. After a couple minutes, Natalia noticed that something was wrong. With a surprised voice and her eyes wide open, she asked me, "Is he passing?" I nodded. She quickly told the oncology fellow, "I'm sorry, I have to go. I think my husband is passing," and hung up the phone. We watched Kevin silently, waiting for him to breathe. When he took another breath, Natalia let out a sigh, put her head against his, and started calling out to him. "Kevin! Kevin! Please don't go! I don't know what to do without you!" Then she turned to me and said, "Please don't leave. I don't want to be alone when he passes." I nodded to let her know that I'd be there for her. I wouldn't want to be alone either if someone was about to pass away, especially someone I love. She continued to talk to him closely, pleading in tears for him to open his eyes one last time. A minute later, the nurse walked into the room, seeming to know what was going on. The nurse stood quietly next to me, which gave me moral support. We waited in suspense for each breath. The seconds of silence between each breath felt like minutes, and each successive pause seemed to become progressively longer.

he three of us watched Kevin silently for about a minute anticipating one more

But there was none to heard.

over

reached

to

LEARNED THROUGH HIS DEATH...99

listened to Kevin's heart and checked his pulses. He turned to Natalia and said, "I'm sorry for your loss. Please let us know if there's anything we can do for you." A few minutes after Charles left the room, my pager went off. Even though I had it on its quietest setting, it sounded obnoxiously loud in Kevin's room. The page was from Christine letting me know that Kevin had just passed away and reminding me that I needed to finish my write-up for the new patient I had admitted earlier. Natalia was still weeping quietly and had asked me to stay just moments ago,

utes later. We watched quietly as the intern

s I talked with Christine about what had happened to Kevin, I couldn't help but wonder if there was anything we could have done differently to keep him alive. Perhaps if we had tried the different chemo before his kidneys started failing... but there was a good chance that it might not have worked at all, and it may have even worsened his condition. Perhaps we had waited too long just to see his bilirubin come down, but even if we hadn't, there really wasn't anything we could have done.

As I considered various things that could

have affected the outcome and pondered the frailty of human life. I remembered somethina

missionary doctor once told me: Lives of our patients are not in our hands, but in God's. Ultimately, we as healthcare providers do not determine whether a patient dies or lives, but God does. Realizing this truth was both humbling and comforting for me. I was humbled because it spoke to the finite nature of one's ability to keep a patient alive, and comforted because it meant that we do not need to be overburdened by the deaths of our patients as long as we have done our besttotreatthem. I hope that I will never forget Kevin and the lessons I learned through his death, so that I will always remember

his chest with my stethoscope and listened for heart sounds. Silence. I checked his carotids. No pulse. I walked around the bed to the other side, stepped across the IV pole, and leaned toward his face to check his pupils. Fixed and dilated. I stepped back and turned to Natalia. She asked me, "Is he gone?" I opened my mouth, but unable to find a word, I stood there silently with my head down. She understood what I wanted to sav. Natalia cried with a loud voice and threw herself onto Kevin. The nurse and I stood silently as she wept loudly over her dead husband.

Natalia had calmed down a bit when

I was contemplating the irony of my resident paging me to letting me know that Kevin had died, when I was in the room with him. Nonetheless, owing to my loud pager, Natalia realized that I needed to go. She turned to me and said, "It's ok if you have to go. Thank you so much for staying with me." As I turned to leave, she added, "I think you're going to be a great doctor. You were very patient and kind with us from the beginning. I wish you the best for your future." I thanked her for her kind words, gave her my condolences, and said goodbye.

so I wasn't sure if I should leave. Meanwhile,



Untitled. Michele Lee MS IV

DARWIN ON HIS TOAST (A SECULAR HUMANIST'S VISION)

BY STEPHEN BAIRD, MD

While driving on vacation one pleasant springtime day I found a place for breakfast, The Hitching Post Café. I ordered eggs and bacon and toast and coffee too. The waitress brought my order, then stopped like stuck in glue. The customers sensed something and gathered 'round to see Just what was in the breakfast the waitress brought to me. For she stared at my order, then, like she'd seen a ghost, She cried out, "Lord have mercy; it's Darwin on his toast."

The faithful said, "It's Jesus, 'cause Mary has no beard." The skeptics said, "What image?" Biologists all cheered. The atheists saw Darwin. Agnostics were not sure. The scientists had theories, some simple, some obscure. Republicans said liberals had made the face appear And, if we lowered taxes, the face would disappear. Amidst all this commotion, both certainty and doubt, I smeared on jam and butter, then ate it and walked out.

I headed for the highway and I have not returned. And if there was a lesson, it's one we have not learned. But they tell me a placard outside the Hitching Post Says, "Here some old professor saw Darwin on his toast."



a while.

BY IAN NEEL, MS II

The first thing Jake noticed was the sky. Strange, I know, as there was nothing different about the sky. Blue, stretching to infinity, some clouds, just an ordinary sky. Nonetheless, it was the first thing Jake saw. This was probably because he was supine, and when his eyes opened, there it was. next thing Jake noticed, was the sudden, overwhelming migraine that tore through him as his brain caught up with his body's wakefulness. Retching, his stomach rebelling against him, he rolled onto his palms, the sound of dry heaves filling his ears. This new position enabled him, once he was able to hold his eyes open again, to notice that the ground, unlike the sky, was not normal. Jake's fingers stroked the surface on which he lay, noting its slippery, glistening texture. The ground was a sickly yellow, smooth and marred only by an occasional pit leading to what, Jake could only wonder.

Rising slowly to his feet, hands pressing against his thighs to aid his ascent, he takes a step forward, nearly stumbling back to the ground as his foot slips. Shaking his head, he takes a few steps to get used to this odd surface. Looking around, his sandy brown hair whipping across his brow with the periodic gusts of wind that seem to strengthen every few seconds, he notes a signpost in the distance. Shrugging, he walks to it.



If the population is zero, who put the sign here? Jake wonders. Reaching forward he pushes on the sign, watching it bend in the alien ground, its post firmly rooted, yet the ground letting it move back, as if it were stuck into a piece of rubber. As he pushes on the sign the periodic gusts of wind increase in their frequency, growing strong enough to nearly knock him over. He releases the sign, tilting his head in confusion, examining it from all sides as the wind begins to subside.

Speaking of populations, Jake thinks, how'd I get here? He tries to remember, but all that arises from delving into his memories of the recent past is a sense that his purpose, whatever it was, was important - that and a worsening of his migraine.

As Jake continued experimenting with the sign and its apparent connection with the wind a voice was heard off to the left.

"Will you knock that off?" it called.

Jake turned to the direction of the voice to see a spry elderly man approaching. The man looked as if he hadn't eaten in days, his tattered brown shirt and beige slacks ballooning out around him, giving him the appearance of a medieval jester. A dirty, vagrant jester, Jake guipped, noting the man's long, oily hair and beard.

"What do you think you're doing here?" the stranger asked as he approached, his finger pointing accusingly at Jake.

"Me? I...I don't know." Jake said, his face wrinkling in thought. "I just woke up here."

"Well wake up somewhere else next time," the stranger replied, standing close enough that Jake could confirm his assumption that his new companion hadn't bathed in quite "And stop messin' with my sign."

"Your sign? You made this? Why does it say there's a population of zero if you're here?"

"Because I'm nobody." Jake opened his mouth to protest Nobody's reply, but decided against it. His head hurt too much to care.

"Well, could you at least tell me where here is?" Jake asked. "Your sign only says 'L. C.' which isn't much help."

"Lac...Lac something...I forget...it's not important." Nobody brushed off Jake's question, countering with his own. "What's important is why you're trespassing on my property."

Jake held his head in his hands, feeling his pulse throbbing behind his temples. "I told you I don't know. I must've been knocked out or something because I've got this splitting headache, and can't remember anything beyond waking up and getting ready for work; I'm a doctor, and was about to start my first day at a new immunology clinic."

Jake eased himself to the ground, shutting his eyes and trying to will his migraine away. As he contacted the spongy ground, he jumped, feeling something sharp poking him from his pocket. Cautiously lowering his fingers into his back pocket, he felt the intruding device, lifting it out to gaze upon it. The device was about half a foot long and half as thick, made of shining steel. Jake rolled the cylinder in his fingers, Nobody studying it from above him. One end of the cylinder had a black rubber stopper, with a red button labeled "PUSH" in the center. The other end was angled like a thick pencil. The number 119 was stenciled across its length, with the word "EXPERIMENTAL" opposite the number.

"This looks like an EpiPen," Jake ob-



served, "but I can't

think of any reason I'd need it. I don't think I have any allergies. Maybe I was bringing it to a..." Jake lost his train of thought when he saw Nobody's face, slack with awe, eyes wide and fixed on the auto-injector.

"The Cadó!" Nobody fell to his knees before Jake, folding his hands reverently over Jake's. "You possess the Cadó. Jake, you say you don't know what this is? Why you are here? You are here for this."

Nobody took EXPERIMENTAL 119/Cadó from Jake, waving it before his eyes. "You must protect the Cadó; protect and deliver it; deliver this land from calamity."

"What are you talking about? 'The Cadó?' I've never heard of such a thing." Jake replied, his eyes following the cylinder as Nobody shook it.

Leaning back on his haunches, dark shadows fell across Nobody's eyes as he began to speak. "When this land was first created, that sign behind you was remarkably different. Where now lies a zero, there once was a population so abundant that the number would not fit on my sign. Creatures of all shapes and sizes roamed freely and peacefully across L. C., climbed amidst the pits of Ciaccio, swam in the Great Lake, coated the far off White Mountain, even the borderland amidst the volcanoes of Puncta. This was not to last.

"Calamity fell upon the land in the form of a deluge, tornadoes, even a burning rain. By the time the disaster had ended, not a single creature remained. But you hold the *Cadó*, the device predicted by the ancients to restore the land to its former glory. You were

given the *Cadó*, so only you may use it, and use it you must. Thrust it into this land and you shall restore it."

"So, what, you're saying I need to inject this thing into the land? You think that's why I'm here, wherever here is? You do realize you sound as crazy as you look," Jake said, as he accepted the *Cadó* back from Nobody.

"Is what I say any crazier than someone who has the *Cadó* and doesn't remember having it before waking up in a foreign land with no recollection of how he got there?"

"I'll give you that," Jake replied.

"And I can guarantee that if you perform this task, save this land, you will learn how to get back to where you came from."



Goliaths, Mohammed Suhail, MS I

The lake's surface appeared to be shining, and somehow taut, like it was covered in thin glass.

Nobody smirked, his eyes tantaliz-

ing, seeming to hide some fount of knowledge behind them. He pointed behind Jake.

"Down that way lies the Great Lake. Cross it, and you will find yourself at the base of one of the twin volcanoes of Puncta. There lies a magical spot in that hallowed ground upon which you must return the contents of the Cadó."

Nobody rose and glared down at Jake. "Arise and walk. You must not waste your time."

Jake did so, his headache, he noted, having dropped from feeling like a rift in his skull to a soft throb. "I guess I'm ready when you are." Jake said to Nobody.

"No, my friend, this is for you alone to do." And with that Nobody turned and walked away in the opposite direction.

Jake watched Nobody leave, scratching his head, confused. Well, I've got nothing else to lose, Jake thought, and so he decided to deliver the Cadó. Returning cylinder 119 to his back pocket, Jake turned, heading off in the direction of Nobody's finger, remembering too late he should have asked how Nobody knew he was called Jake. I never introduced myself, Jake thought.

It wasn't long before Jake arrived at a vast body of water, albeit the strangest water Jake had ever seen. This is the Great Lake the jester described? He wondered, taking in the liquid before him.

The ground curved sharply downward inches in front of Jake's bare feet, the pasty white surface met by the water. The lake itself was clear enough that he could faintly make out the red floor of the lake some depth below the surface, although how deep he couldn't tell because of the strange sheen coating the water. The lake's surface appeared to be shining, and somehow taut, like it was covered in thin glass. Kneeling, Jake reached out, watching as his finger passed through the water's surface. Not glass, he thought. As he pulled his hand back the water stuck to his finger, stretching up and dripping off his fingernail in beads. Some kind of clear oil maybe, he wondered, thinking back to his days in chemistry lab. Hesitantly, he tasted the liquid, immediately scrunching his face at

the saltiness of it.

"There's no way I can swim through something like this without risking damage to the

Cadó. That salt could erode whatever is inside." Jake exclaimed. talking just to hear something other than the periodic puffs of air blowing past him.

"Sounds like you need a ferry then," called a voice, deep and rough.

Jake turned toward the sound of the voice and saw a man ap-



proaching. The man was bone thin, his bald head glistening in the sun, contrasting with his eyes, set so deep they were masked in shadows. The man ran a hand down his long, flowing white beard, a red ribbon tied loosely around the tip, at heart level. He wore a plaid shirt covered with waders, like that of a fly fisherman, yet no fishing pole was in sight.

"I'm the ferryman," he said, coming to a stop in front of Jake.

"For a land with a population of zero, this place seems to be growing more crowded every time I turn around," Jake quipped.

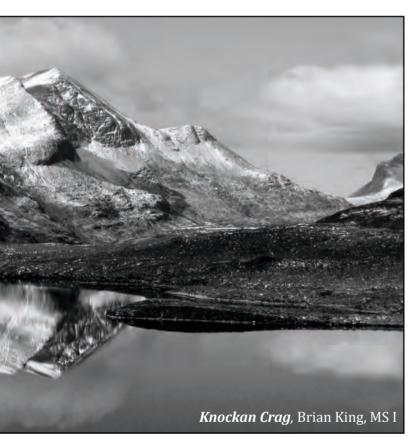
"Pshaw, don't lump me in with those L. C. fools...or fool as it may be now...are they really all gone? No matter. I'm the ferryman for the Great Lake. Do you seek passage?"

"Well, yes I do, but..." Jake looked up and down the shoreline, "...I don't see a boat anywhere."

"Of course not. Look around do you see anyone waiting in line to ride one? It's a slow business, ferrying for the Great Lake, especially since the catastrophe that swept L. C. Too much work to keep up a ferry.

"If you want passage though, I am the ferryman, and I will take you across. We just need to get something to sail on."

"Alright, where do we start?" Jake asked.



"Look down."

Jake examined the ground around him, but saw nothing he could use, the land as barren as it had been where he had first awoken. He took a step toward the ferryman to ask what he was looking at, but as he dragged his feet across the ground, he was shocked to see it bend, pushed upward by the slide of his foot. He recoiled off the section of disturbed ground and saw that it had smooth edges, the drag of his foot having bent it, revealing that he had separated a piece of the ground from the rest, like bending a tile of vinyl flooring.

"The ground here is strong. It's what my ferry used to be made from. One of those should do fine." The ferryman said. "Just pick that up and take it to the water."

"Aren't you going to help me?" Jake whined.

"Nonsense, this is your journey, Jake. I'm here to ensure you safe passage, but do the lifting? Not in my job description." With that the ferryman spun on his heels and proceeded to wait by the edge of the lake.

Muttering curses at the man, Jake slid his fingers beneath the segment, pulling backward and lifting the ground, removing a diamond-shaped plate so thin that he could see light shining through it. Gripping two points of the diamond he tugged and saw the plate stretch, but it remained intact. Jake carried the ground reverently to the lake, laying it on the glistening water.

"Can this really hold the both of us? It feels strong but look at it, it's so thin." Jake asked the ferryman.

"I am your guide, trust me." The man touched his finger to Jake's temple. "I know a thing or two about these things."

Jake removed the Cadó from his pocket, and holding it tight in his fist, took a tentative step onto the piece of ground. It sank slightly but remained afloat as he shifted the rest of his weight onto the makeshift raft. After experimenting with the buoyancy of the ground, he sank into a sitting position, the water rising, covering his legs entirely, but he sank no further. After he was seated, the ferryman stepped onto the raft behind Jake, but to Jake's surprise, it didn't sink any extra distance. Standing firmly the ferryman pointed over Jake's head, his fingertip fixed on a faint shape in the distance. "Row," He commanded.

Jake cursed again at the man's insistence on not doing work, but draped his right hand over the side of the raft and began to paddle, keeping the Cadó in his left, suspended above the water. It must be something about this oily residue, he thought, seeing the water drip like syrup off his fingertips whenever they emerged from the surface, it must be doing something, or this wouldn't be so easy to row.

Jake paddled toward his destination, his face set with determination, the ferryman standing over him, hand on his knee, like a caricature of George Washington in the Leutze painting, eyes fixed on the horizon.

t was not long before a towering mountain became visible in the distance, the pale, tan surface of it reflecting across the surface of the Great Lake. Jake angled his raft, lining it up with the reflection and

paddled along it, the oily water warm beneath his fingers as he pushed onward. "That must be the volcano of Puncta," Jake marveled, overwhelmed by its height. And boy am I glad I don't have to scale it, he thought, noting the volcano rose up almost perpendicular to the lake, the surface as smooth as the ground of L. C. had been.

"That it is," the ferryman commented. He eyed the Cadó clutched in Jake's fist. "Why are you doing this? What do you hope to gain by delivering that?"

"I...well, that man, the one that keeps the L. C. signpost. he told me I had to, said it would return me to where I came from."

"Do you even know what that will do?"

"No, but if it gets me back, I don't really care."

The ferryman sighed, and walked along the edge of the raft, kneeling in front of Jake. "But you must admit that it's rather unwise to act without giving some rational thought to your actions beforehand."

"Well normally, yes, but this isn't the time." Jake rolled the Cadó nervously in his fingers, his other arm begin to give off a dull burn from the repeated motion of rowing. "I can't quite remember why I'm here, or why I have the Cadó, but I feel like whatever my reasoning, it was urgent."

Suddenly Jake felt the raft scrape against something solid, the lake having grown shallower, and the ferryman rose up before him. "Well, we've arrived." He said stepping off the raft, Jake rising up and following.

"I'm just the ferryman, a guide to take you across the lake, as you desired. What you do from here is up to you. If you are determined to deliver the Cadó, do so, but remember," the man pointed to the center of Jake's forehead "using this goes a long way. I urge you, think before you do anything else. Think about what that device is, and what you are doing with it. Think about why you are here."

Jake did take a moment to think, but not about the Ferryman's words. There lies a magical spot in that hallowed ground upon which you must return the contents of the Cadó. Nobody's words echoed in Jake's mind. Unsure of what a magical spot would look like he began to search the base of the volcano where he stood.

"I'm supposed to find a 'magic spot' to deliver the contents of the Cadó." Jake told the ferryman. "Any idea where the spot might be?"

The ferryman sighed deeply, shaking his head. "You must go on alone from here."

"But can't you come with me?"

"This lake is mine, beyond is not. Guiding you any further is not in the job description."

"Can vou at

least point me in the right direction? Do I go that way?" Jake pointed left, "Or that way?" He asked pointing right.

"This is your choice. If you wish to carry on, then ask yourself: which way feels right?"

Jake rubbed his temples, closing his eyes as his migraine made sure he didn't forget its presence. "Fine, well, thanks for the guidance, I guess." Jake said, opening his eyes and turning back around. He blinked, astonished. The ferryman was nowhere to be found.

His head pounding, he didn't waste time wondering where the man may have gone. The ferryman had served his purpose. Which way feels right? Ha. What nonsense. I feel nothing, Jake thought.

He shrugged and began to walk, his feet heavily carrying him to the left, slowly circling the volcano, eyes fixed on the ground, looking for something that may be "magical."

It was not long before Jake suddenly came to a halt. There before him was a sight that he could hardly believe. Rubbing his eyes he looked again and sure enough, it was still there. A column along the ground was pulsing, rising and falling, as if the ground were breathing. The pulsation was restricted to a thin column that ran from the edge of the volcano back, disappearing under the surface of the lake. This must be the spot Jake thought, kneeling before it. He ran his palm over the spot, feeling the ground pulse *Thump-Thump.Thump.*

Looking down his arm at the metal cylinder he thought here goes nothing. Jake placed the pointed tip of the Cadó against the column of pulsing ground and slid his thumb over the red button labeled "PUSH." Unsure of what would happen, Jake gritted his teeth, steeling himself, and depressed the button, a soft *whoosh* rising from the cylinder as it injected its contents into the ground.

Pulling his hands back, he raised to his feet, looking around him, "Nothing? Was this the right spot?" Jake doubted he could have gotten the spot wrong, and his fears were quickly put to rest, replaced by a new kind of terror.

The ground suddenly began to shake violently, ripped by an earthquake that tore Jake from his feet, sending him crashing onto his back, his head slamming hard against the ground. Looking up, his hands gripped the ground, scratching, desperate to find something to grip onto as a clear liquid began to erupt from the volcano. The eruption was the least of Jake's concern as the shaking sent him rolling down the slight slope of the ground into the lake. Jake desperately flailed his arms, swimming to the surface, the now empty container labeled 119 floating away, forgotten. His head broke the surface of the lake for a moment and he gasped a quick breath before the waves created by the quake slammed him back under the water.

The volcano meanwhile ignored Jake's plight and continued to erupt, its liquid spilling forth, rapidly filling the lake. Jake spun, ripped through the water like a rag doll, a current tugging at him.

Jake's

lungs burned in his chest, protesting the lack of oxygen, and soon his medulla had enough, and signaled him to breathe. Jake sucked in the salty water, feeling it warm him as it began to pour down his throat and fill his lungs.

So this is what drowning feels like Jake wanted to think, but all his mind did was scream in time with the choking gurgles emanating from his lips. The current sweeping him across the water increased with



every passing second, and soon he was being dragged up a sharp incline, having reached another edge of the lake. Hope filled Jake's panicked eyes, *ground! I'm gonna make it!* He thought. However it was at this moment the current sent Jake plummeting through the air. Jake had fallen off the edge of the world.

erhaps it was the fall from the earthquake that jarred

Jake's brain, or maybe the shock of drowning followed by the bigger shock of suddenly free falling, seeing the lake pouring in a waterfall off a sharp edge with nothing but sky beneath him — as to the cause we never know, but something induced his screaming mind to have a moment of lucidity. As Jake plummeted, the wind deafening as it ripped past his ears, he suddenly remembered how he came to the odd land of L. C.

. . . .

"How's he doing?" Jake asked Lucy, his most trusted nurse. Lucy glanced out the window at 7 year old Stephen Reynolds, watching as one of the candy-stripers pushed the boy in his gurney down the concrete path leading around the robust garden at the rear of the Children's Hospital. Stephen's head was lifted a few inches off the gurney, looking at the sun-filled sky, the clouds pushed across it by the air he couldn't breathe, wishing he could run his fingers through the grass on either side of the walkway but knowing he never would. He reached his hand out pressing it against the clear bubble that covered his gurney, breathing the purified air pumped in by the portable tank stored on the side of the hospital bed, imagining the prickly feel of the grass passing over his fingertips.

"Not good, Dr. Retter." Lucy reached out and rubbed Jake's arm, her eyes filled with sorrow. "He just keeps getting worse, and the Cipro hasn't been able to do a thing about this latest infection."

Jake sighed heavily, running his fingers through his hair. He'd been the chief of the department of pediatric immunology for ten years and never had he encountered such a difficult case as that of Stephen Reynolds. Stephen was born with Severe Combined Immunodeficiency, or SCID, as everyone on the ward called it. His parents had transferred him to Jake's clinic as Jake had a sterling record with bone marrow transplantation cures for SCID. The acronym SCID, Jake recalled as he watched the volunteer wheel Stephen back to the hospital, whisking him away to the isolation ward, was horrifying as it meant Stephen's body lacked an adaptive immune system, leaving the boy vulnerable to infection and death by even the most minor of infectious diseases. Jake had been unable to provide the boy with a bone marrow transplant as Stephen's body had been rejected by every donor they'd found that possibly matched. All Jake had been able to do is pump Stephen's blood full of antibiotics, fighting off infection after infection. As the antibiotics stopped working and the bacteria began to win their war, Jake had taken desperate measures, having Stephen's body scrubbed sterile and

placing him in a bacteria-free world.

trapping him in a bubble. It was no existence, but until he could get Stephen's bone marrow to start producing B and T cells, that bubble was all that kept the boy alive.

"It just tears me up, Lucy, to know that even with all the scientific breakthroughs we've made, we still can't help him." Jake said.

Jake knew some advances existed that held hope, but they were still so experimental, there was no way he could safely try them. Or so he had thought...

A month later, Stephen had taken a turn for the worse, his body just giving up. Jake had not seen the boy in over a week. having locked himself away in his private lab. He glanced up at his calendar and ripped off the last week's worth of pages, rubbing the dark circles under his eyes as he looked at the date: "18 September 2242."

He turned away and picked up the cylinder that he had spent the last week creating. "119" it declared on its side in bright green letters. "It's now or never," he said to himself as he slipped the cylinder in his back pocket, leaving his lab behind him. He hurried to the operating suites rethinking what he was about to do, but swallowed heavily, knowing if he turned back now, there'd be no chance of saving Stephen.

He had talked with Stephen's parents at the start of that long week.

"I wouldn't suggest this if I thought there was another option, but we're out of time," he had said. "Your son has no time left. His body isn't responding to the antibiotics any longer, and every bone marrow donor we have tried has wound up attacking Stephen's cells. That's why I want your permission to isolate some of Stephen's stem cells. I don't know if it'll work but I want to try to mutate them and

replace the gene that's causing his marrow failure, then inject the modified cells back into him. I've been working on a mechanism to create...well I guess you could say they're 'super stem cells' of a sort, a highly concentrated, microscopic dose is all that's needed but it's never been tried outside of my lab. and most certainly never in a human."

Jake was going to explain more about what made his technique successful and describe the risks but was interrupted by Stephen's father.

"Do it."

A week later, Jake entered the operating room where Stephen awaited, and walked into the sterilization chamber. Jake waved at Dr. Salguero, the surgeon who would hold Jake and Stephen's lives in his hands. as the antibacterial foam filled the chamber, and cleansed Jake's body of all bacteria. Stepping into the surgical suite, Jake proceeded to a large steel capsule and stepped onto it, Lucy standing by to press a set of buttons after he had positioned himself on a metal plate, standing under a shining green crystal suspended from atop the capsule. He closed his eyes as the door to the capsule slid shut, sealing him inside below the now glowing crystal. As a beam of pure energy descended from the crystal, enveloping his body in its hazy glow. Jake remembered his trials of this machine on the mice in his lab, recalling how awed he had been when he had achieved his first successful trial. He knew as he was warmed by the glow that it was rearranging every cell in his body, causing them to contract, and grimaced as he heard the creaks of his bones as the process began. The device he had called "118," never liking the true name of it, as the name ushered in visions of those terrible b-movies he used to watch as a child. Still he knew Experiment 118, his "shrink ray," was his only chance to save Stephen. The procedure he was undergoing was simple enough – he'd be shrunk to microscopic size, placed within Stephen's hip

he would proceed to place his stem cells carefully within the most optimal location to induce a successful integration. What scared him was the amount of mutations that he could incur upon the reversal of his shrunken state. Further, there were the possible complications that could very well result in Stephen, including the development a rapidly growing tumor instead of a life-saving dose of clean bone marrow.

When Jake opened his eyes again, he marveled at how everything looked the same. except for the fact that it now appeared that the two-foot wide metal plate he was standing on was miles long, and he could only see an enormous foot, where once he was gazing into Lucy's eves.

Lucy opened the capsule and carefully lifted the metal tray, carrying it with the utmost care to Stephen, and placing the edge of it against the boy's hip - Dr. Salguero had just finished exposing the bone.

Jake waited until the tray he sat on stopped moving then raised himself to his feet and began his walk to the edge of the tray. He made it halfway there before disaster struck.

Stephen's anesthesiologist Dr. Tramwell had fallen asleep after the second hour of waiting for Jake to finish his procedure. They knew it would take him four hours to cross the plate, and another two to get to the correct spot within Stephen's hip, but Dr. Tramwell had been up for forty-eight hours already, due to a number of emergency surgeries that had occurred recently, and all the coffee in the world wasn't going to stop Tramwell's brain from shutting down for some much needed rest. As he slept, no one noticed the faint blinking light on the machine begging Dr. Tramwell to hurry up and administer another dose of Etomidate, as it was well past due.

Dr. Salguero and Lucy were fixated on ensuring stability for the metal plate, so neither of them noticed as Stephen's eyes fluttered open. With a startled cry, Stephen



panicked not knowing what was happening, just struggling to break free of the table and rip out the tube that was shoved down his throat. He kicked and writhed against the soft restraints holding his limbs down, and in one of his more violent tugs, managed to free one leg. His knee shot upwards, slamming into Dr. Salguero's arm, causing the doctor to cry out as he jumped up in shock, his hand flying upward and smacking the bottom of the metal plate.

"Isn't it strange," Salguero would much later comment to Lucy as they reminisced at Jake's memorial service, "how primal the instinct to live is. That little boy waking up in

that situation, petrified, it must've been all he could think of to save himself, not realizing he was struggling against the very people trying to save him. Poor Jake...sometimes it's the fight for life that kills us."

ake was unaware of the struggle in the operating room as Dr. Tramwell awoke, hastily re-anesthetizing Stephen, but not in time to stop the calamity. All Jake was aware of was being launched into the air, tumbling in cartwheels across the room. Gravity took over eventually correcting its mistake of allowing this miniature man to fly, tugging him down to Earth. Jake landed on his back in

eye. Had he not been rendered unconscious by the swift blow to the head he incurred upon landing, he may have recalled that the spot he landed upon was not actually Stephen's eye, but rather his lacrimal apparatus.

As Lucy sobbed at the horror of losing Jake, knowing they'd never find his microscopic body, and Dr. Salguero began sewing Stephen back up, the surgery now cancelled, Jake lay passed out in the middle of Stephen's lacrimal caruncle.

Remembering Stephen, Jake felt tears stream down his cheeks, warm and salty, only much smaller than those he encountered in Stephen's lacrimal lake. I failed he thought as he fell.

Closing his eyes, he thought back to something the ferryman had said. It's rather unwise to act without giving some rational thought to your actions beforehand.

Would things have been different had I waited? He thought. He couldn't help but laugh at the irony of his situation. Ruled by emotion, I sacrificed everything to try to save Stephen. I broke every code of research protocol. But if I hadn't, would anything have changed? He tumbled through darkness, his eyes still clenched shut, feeling his body whipped to and fro in the air, his free fall seeming endless. He wondered where he had been within Stephen's body, and whether that pulsing "magical spot" could possibly have been a blood vessel that may be able to carry some of the stem cells to a place within Stephen where they can help. Maybe all is not lost, he thought. Maybe I made a difference. I did. Didn't I?

Jake leaned back his head, gazing up at the slowly forming boy that he fell from, the ground rapidly rushing up beneath him. "Ah, bugger, I was in his eye," were Jake's last words.



Mornáng! Laubs:

By Rishi Doshi, MD, Class of 2007

Doctor, I do not mean disrespect But I am beginning to suspect that this needle Is not as sharp as it seems Blindly it searches my blood **Burrows for answers** Because you asked a question Whose only sin Was to boil beneath your skin Every morning Net you in Offer you a drink But my libation, though precious, Never presses you To pause for conversation You sip, unsatisfied, and saunter away To seek your revelations Among the charts and careful calculations. Doctor, I do not make a habit of defiance But if the morning once more exposes my skin And the stab reveals what flows within I will lose myself But I must correct you when you call it Non-compliance. It is not help that I refuse But by this time

When your answers have not come

You should begin to suspect that this needle

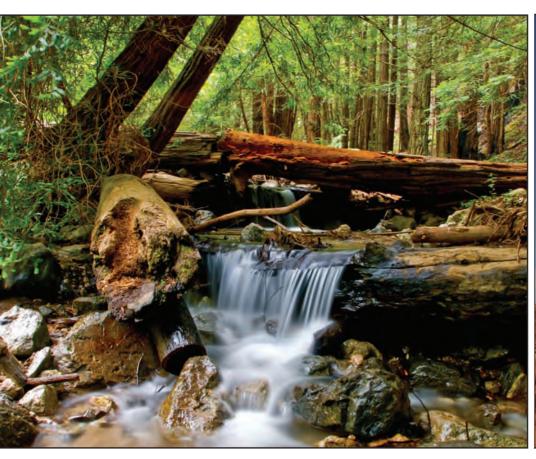
And that metal tip still gleams

Is not as sharp As it seems. (Below Clockwise): **The America**, Jeffrey P. Harris, MD, PhD **Morning**, Yueyang Guo, MS I **On the Water**, Jennifer Hagstrom, MS I











(Above Left to Right): Cascade, Pascual Dutton, MS III Open for Business, William Auyeung, MS II Windansea, Aaron Rutman, MS III







(Below Left to Right): **Domain,** Erin Shively, MS II **Untitled,** Pascual Dutton, MS III



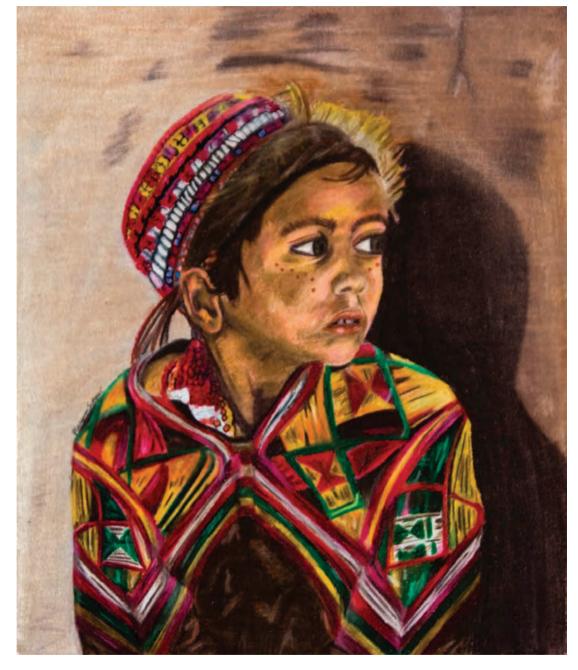






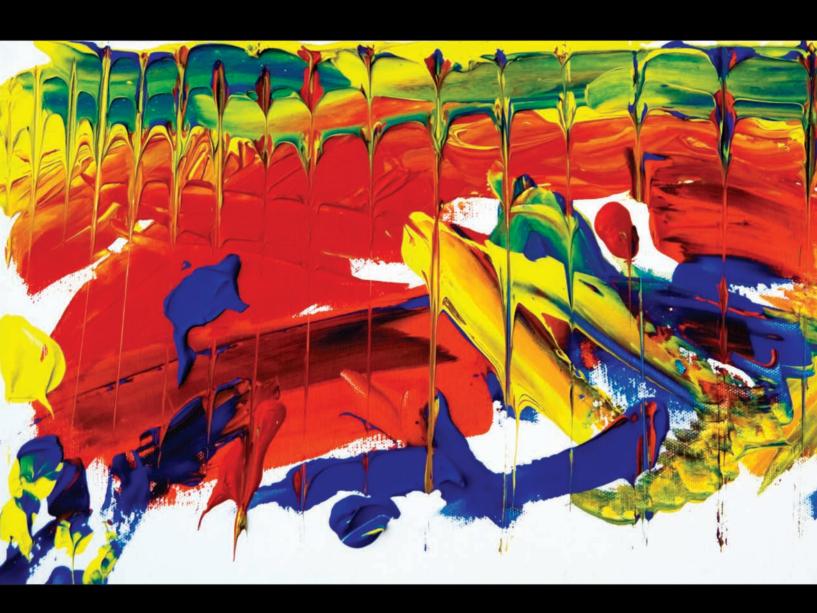


(From Left Clockwise): **Untitled, Pascual Dutton, MS III Untitled,** Maryam Soltani, MS I Fort Point, Aaron Rutman, MS III

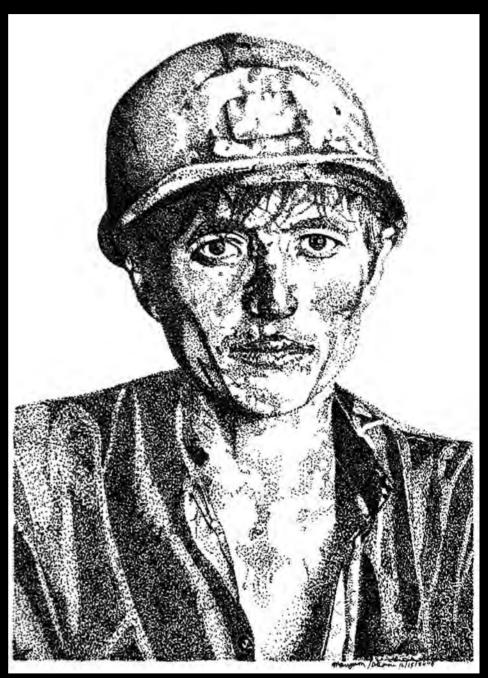




(Left to Right): *The Circus,* Amir Misaghi, MS III *Untitled*, Maryam Soltani, MS I









(Above Clockwise): Whirling Dervish, Scott Mullaney, MD Untitled, Marina Zotova, P II Strength, Ruben Carmona, MS I





INTERVIEW:

Three UCSD physicians discuss their experience with the medical relief effort in Haiti BY OMEED SAGHAFI, MS IV

On January 12, 2010, a magnitude 7.0 earthquake shook Haiti. The earthquake was centered a few miles from Port-au-Prince. Much of the capital was destroyed, and the death toll surpassed 230,000.

Even before the earthquake, Haiti was one of the poorest countries in the Western Hemisphere with over 3000 NGOs (Non-governmental Organizations) for a population of 10 million - the second highest per capita in the world. Haiti's chronic poverty made it particularly vulnerable to the destruction caused by the earthquake; the poorest inhabitants lived in houses and buildings that could not withstand an earthquake and the government did not have the resources to respond adequately.

A massive international relief effort followed. In the first two weeks after the earthquake, the Red Cross alone chartered over 40 flights and distributed 2.5 million liters of water and 550 tons of medical supplies.

Three emergency physicians from UC San Diego joined the relief effort in Haiti from January 15 to February 2, 2010. Chris Sloane, MD, Colleen Buono, MD, and Sean-Xavier Neath, MD were sponsored by International Relief Teams (IRT), a San Diego based relief organization that has deployed over 200 teams of volunteers to aid in disasters all over the world since 1988.

I had the opportunity to sit down with each of the three physicians and discuss their experience in Haiti.

What motivated you to go to Haiti?

CS: I had helped with Katrina before and I am a member of DMAT so [relief] is something that I enjoy doing.

SN: I was a former Peace Corps volunteer in Haiti about 25 years ago. I know Haiti, the culture, the customs. I speak Creole and French. When the earthquake hit I happened to be in Miami on business but had to come back to San Diego to get my deployment here.

CB: With my experience with disaster drills, this is my area of interest. So I was interested in going from the beginning although I had not been on an international mission before.

How Did You End Up Getting To Haiti?

CS: IRT is an NGO centered in Mission Valley. They send people to different places to do education, surgery, and some disaster relief. Barry La Forgia, the executive director, set up an agreement with this group called the International Medical Corp (IMC) based out of Santa Monica and Washington D.C. to supply people for disaster relief. The IMC asked for 3 doctors and 2 nurses and met us in Santa Domingo. It ended up being 4 docs and 1 nurse because one of nurses wasn t able to make it.

We flew from Los Angeles to Santa Domingo in the Dominican Republic. We were supposed to get flights from the UN into Port-au-Prince, but

Dr. Sloane, who acted as the team leader during the mission, is also a member of the Disaster Medical Assistance Team (DMAT CA-4) and had previously deployed to the New Orleans Airport in support of the medical evacuation after Hurricane Katrina.

Dr. Buono, director of the EMS-disaster fellowship at UCSD, has a fair share of experience with disaster relief. She acts as one of the Medical Directors for the San Diego County Metropolitan Medical Strike Team (MMST) for response to terrorist acts in San Diego. She is also the Chief Medical Officer for the DMAT CA-4 and co-directed the medical response at Qualcomm Stadium during the 2007 San Diego Wildfires.

Dr. Neath, also an emergency physician at UCSD, had previous experience in Haiti. He was deployed to Haiti as a member of the Peace Corps in 1980. While in Haiti with the Peace Corps, he worked on health education and healthcare organization.



(From Right): Drs. Neath, Sloane, and Buono with co-members of the IRT in Haiti.

we kept getting bumped for various reasons. So we chartered a bus and drove 14 hours.

What was it like being part of an international disaster relief effort as opposed to one on the national level?

CB: It was different in several ways. You obviously have to go with a different government and deal with multiple agencies and NGOs. There was also a lot of terminology specific to international medicine that we learned while we were there. There are also many cultural differences.

Where did you end up being stationed?

CS: We were in downtown Port-au-Prince at the university/general hospital. IMC was running the operation on our side; they were our contact, providing our shelter, our food, and our supplies. We also brought some supplies from UCSD.

CB: [Dr. Sloane] and I also went out to other clinics in outlying cities for a few days.

Were there any differences between offsite clinics and the general hospital?

CB: We were limited in resources in most places. None of the clinical sites or the hospital sites had electricity, water, methods for sterilization, oxygen, or any real mechanism for acute care in the way we are used to as Western-trained physicians.

What was your role during the relief effort?

CS: The members of the team all picked their assignments. [Dr. Neath], [Dr. Buono], and [Dr. Watson] worked in the ER. Rick, the nurse on the team, worked in the medical ward. I ended up working in "The Forest." We called it The Forest because it was a big compound in the center of the hospital and there were just a bunch of trees, and there are patients just scattered under the trees, on the ground, on beds, everywhere.

SN: My role was to build the new emergency department. The original department was destroyed during the earthquake. We started out with a makeshift ER inside an office building which was not logistically feasible because patients had to ascend a flight of stairs; there was no running water or electricity. We developed a two-tent ER right at the front gates of the hospital, which was much better able to handle the patient flow of several hundred patients a day.

CB: I worked as an emergency physician. I also spent a few days working at outside clinics.

The Forest sounds like an organizational nightmare. Did Forest patients get triaged or did you treat them right there?

CS: We mostly treated them right there because there was nowhere for them to go. There was a medical ward, but it was full. There was a pre-op area, or so we called it, but it was full. It was very chaotic. It was very disorganized compared to other places. For example, the medical ward had one entrance so the police could control who came in and out. In The Forest there were four entrances so people would just cruise in, or patients would get a surgery and then just get dropped off in The Forest.

In the beginning, it was kind of crazy. You had no idea who was doing what. The surgeons would operate and they would discharge a patient to The Forest; you had no idea if they were going to do a staged procedure or what they were going to do next.

What were the main types of medical problems you saw?

CS: We saw mostly orthopedic trauma including crush, open/closed fractures, wounds, wound infections and complications. We took care of a lot of patients who required amputations and had staged operations. If you had a bad infected open fracture, you couldn't fix that in Haiti; there was no way. So they basically would have to do an amputation, leave it open but covered with dressing, and then try to close it again in three days.

SN: The type of problems changed over time. Initial problems were mostly crush injuries, wound infections, and dust-related pulmonary injury. Over time we started to see more routine ER visits. We saw gunshot wounds and cases of local violence, which is endemic in Haiti. We saw people who had psychiatric illness. But there were thousands of people with fractures and wound infections who kept coming until the day we left.

With so many traumas, you can diagnose patients, splint them, but then what?

CS: You wait. You wait for the operating room capacity to catch up. We would diagnose a lot of fractures just on physical exam alone since we had no x-rays. Then we would splint them, give them pain medication, antibiotics for open fractures, and then would have to wait until the operating capacity could catch up. We would sit on femur fractures for ten days. The first sets of surgeries were mangled limbs and amputations, then open fractures, and then finally closed fractures.

Did you see any medical diseases in Haiti that you did not expect?

CS: I saw my first case of bona fide tetanus. I saw three cases of tetanus. It was unbelievable. People just weren t immunized against tetanus. I saw cases of scrofula. And of course, the sheer number of traumatic injuries was more than normal.

CB: One thing that was unexpected was the level of crime. [Dr. Neath] had primed us by telling us that there would be a baseline level of crime and trash and general demise. We had high school students come in with gunshot wounds. We had someone get shot resisting a robber. He died because we did not have the resources to tie up an OR for someone who may not survive.

What supplies were lacking?

CS: There was a shortage of nurses. We had three doctors for every nurse, but it should have been the other way around. And there was no technology.

SN: I think a lot of people faced the same logistical nightmares of getting people and supplies in and out of Haiti. The water port was destroyed and over land was a very difficult way to get supplies. We had no running water, no dependable oxygen supply, and no electricity until we jerry-rigged some wires into a condemned but live building giving us only two extension cords.

CB: Oxygen would have been nice. Some mechanism for more intensive care than we had would have been useful as well. Still, I think that even on a good day before the earthquake, they would not have the capacity for the same level of care as in the United States. We had to lower our standards of care based on what we had available to us, but that really defines a disaster: when you are limited in your resources but still need to take care of patients at the best of your abilities.

Overall, it sounds like initially supplies were lacking but once everything was stabilized, did you feel you had the supplies you needed to treat everyone?

SN: We came with about 200 lbs of supplies per person in our group from UCSD. We were also met with carts of supplies from the World Health Organization (WHO). So in terms of basic medications we had antibiotics, fluids, some narcotics for horrible fractures in the ER. So we were able to provide

some degree of jerry-rigged care for everyone.

CS: We did have medications. Medications were not a problem. What we were lacking were hard durables. There was only minimal oxygen and no x-ray. We had no [ventilators]. There was only one anesthesia machine in the entire hospital.

So you wouldn't intubate anvone?

CS: No. Some people were intubated but it was futiley ou can t bag somebody for three days. It was a disaster situation and it was necessary to triage. It starts to sink in: how many people could you have helped if you just had better equipment or a better situation. So many people would not have died if they were here, certainly if they were here and it weren t a disaster situation.

Reportedly 35 percent of the Haitian population is under 15 and 50 percent is under 26. Was there a lot of pediatric medicine?

CS: A lot. The hardest part was seeing all these kids who required amputations. And the sad thing is that Haiti is not well set up to take care of people with disabilities. Apparently there was only one place in Port-Au-Prince that made prosthetics, but it was flattened in the earthquake. There is now a whole generation that will need prosthetics and either won t get them or will face a significant delay.

CB: We saw a fair amount of pediatrics and had a pediatric tent that ran pediatric inpatient care and pediatric surgery. Still, it was mostly trauma and wound care so there was little pediatric medicine." They all got treated similarly.

SN: In the ER itself, 25% or fewer were children. That could be because the children were more resilient.

What were the lessons learned for American response?

SN: One thing we did well was assume that there would be no supplies there. One thing that we should have tried to pack or gotten was a functional generator and oxygen concentrator to be able to deliver oxygen to patients. We had access to those but they were not functional. It s important to know that Haiti is going to require ongoing medical support. But we have to make certain not to create a culture of medical dependency, which has been the case many times with US interventions in the past. We need to work more with our Haitian counterparts. I think one of the greatest bridges was the support of Haitian-American doctors and nurses who were there.

CS: I realized how important logistics and organization were. When we first showed up there was very little coordination between the groups and things were glaringly inefficient.

It was as if a lot of the people sent to the disaster had not learned about incident command. In many respects the incident command structure was lacking, making it difficult to coordinate. Just having a morning briefing about what would be done throughout the day and where everyone would work did not happen until ten days into the response. And then just getting these groups to organize would have been helpful. The IMC, a group from the Canadian Red Cross, and a group from the Norwegian Red Crossall these groups were there but they were all not really talking to each other. We needed that to happen. One person needed to be in charge. The barrier to that is that none of these groups from all these countries wanted to give up their autonomy. We call it "planting their flag." Everyone wants to say "we were in Haiti, and this is what we did."

People don t like to talk about that. Instead, you hear these briefings on CNN saying "the NGOs are all working together." Organization is so critical to these things.

CB: There needs to be more work on the front-end to unify the NGOs to make sure there is coordination. There could be a "pre-plan" made through the internet or internet meetings to determine who is go-

ing and available resources and how those resources could be distributed.

Dr. Sloane, how did the experience compare with Katrina?

CS: Katrina was a hurricane so we mostly saw water-related injuries, some infections. There was very little trauma. A lot of what we saw was actually medical illness gone awry. Patients with diabetes had sugars that were super high; epileptic patients would run out of meds and have seizures; dialysis patients couldn't get their dialysis. In Haiti, it was almost always traumatic injury.

In Katrina, at least you had a lot of surrounding areas that were not completely destroyed. There were even hospitals in nearby Jefferson Parish that were partially functioning where you could send patients if you really needed something. You could also more easily use air transport to get people to other cities such as Dallas. In Haiti, you couldn't send people anywhere. Whatever you had in Haiti, which was

bad even before the earthquake, was basically destroyed. So you had to keep everyone in Haiti and deal with everything there. There were some places to send people for a "higher level of care." The US Comfort, a naval ship, was available, but became full after 100 patients. A couple other groups were operating hospital type environments but they also became full quickly.

Dr. Neath, having been in Haiti in 1980 with the Peace Corps, did you notice any striking differences?

SN: Surprisingly not. Other than the crushed buildings and devastation, Haiti functions and looks pretty much the same as it did over 25 years ago. There hasn t been much development or growth in the infrastructure. Buildings and landmarks all look very similar.

Do vou have anv recommendations for medical students, residents,

or physicians interested in helping out in future disaster relief?

SN: There are a number of things to do. Most medical students have some sort of language talents either from how they grew up or from school. Keep your language and cultural talents up to date and keep them on your resume. Let people know of your interest and aptitude in helping out in foreign disasters. Make

sure that your passport and travel credentials are up to date so that you can leave on a moment's notice. Take time during your fourth year to do electives oversees. Begin participating at a very early phase in organizations involved in disaster relief such as DMAT.

CB: If you can go with a preexisting organization it s probably the safest and best way to go. They usually will have somebody advocating for you, getting your plane flights for you, setting you up with somebody there, and giving you information. I had two great medical students working there who came with a church group. If you come with a group like DMAT or IRT instead of just a small group it's less risky and you have a little more protection. If you as a provider get injured in some way, you won t be able to help anyone.

What was the overall sentiment of the Haitians you encountered?

CS: I was impressed by how tough the Haitian peo-

ple were. Despite all the death and misery, particularly in The Forest where I was working, they weren't complaining. We would give them ibuprofen for their fractures and they were thankful. It was inspiring to see what people could deal with.

SN: The stoicism of the Haitian population was incredible. They did not complain at all and were grateful for any care you provided. It was extremely touching and reminded you how hardy these folks are and their capacity to deal with everything unblinkingly. It was impressive to not just me but all the other healthcare providers I spoke to.

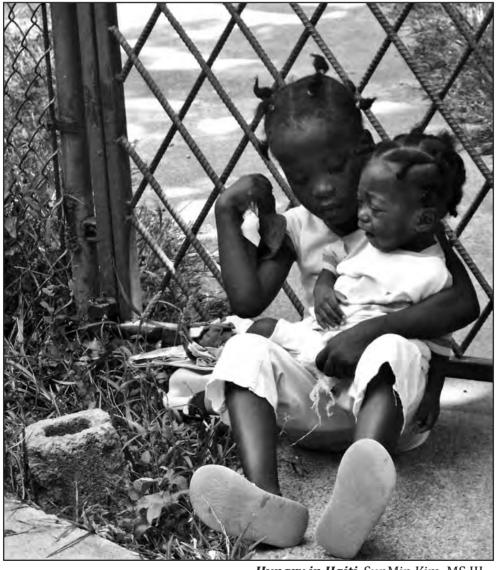
CB: When we got there we saw these amazing people that were able to tolerate these horrible fractures and wound infections without asking for any pain medications. They remained optimistic and took care of each other. I expected crying and a general feeling of depression but that s not really how it was. They would not let anything get them down. They re very religious. They had times every evening at the

hospital where they would all sing the same song. And no matter where you were, you could hear singing throughout the camp or tents. They would do it all in unison; it was their way to bond and heal. It gives me goose bumps just thinking about it. They have this whole other level of thankfulness that they re just alive.

Is there anything else you would like to say?

SN: There is the issue of gratitude towards our colleagues who supported us and covered for us during our leave, and of course for the University for providing supplies.

CB: It was an incredible experience. The medical students we worked with got to see and do things that they otherwise may not do until the end of residency or even never. And, for a physician it really helps to reconnect you with why you really went into this field in the first place.



Hungry in Haiti, SunMin Kim, MS III

PERCHANCE TO DREAM

BY SAPNA IYER, MS II

To die, to sleep
No more – and by a sleep to say we end
The heartache and the thousand natural shocks
That flesh is heir to...
-Hamlet

She had a nosebleed in the middle of the funeral. No time for thought. She was handed something white, someone's anonymous handkerchief. She pressed it to her face and watched as the blood oozed a deliberate, languid course between stitches. Deep red spreading into stark white. Lipstick on the handmade wedding dress. Wine on the new tablecloth. No warm water or the stain will set. Everything around her is black and heavy, save for a red-and-white nosebleed.

A milky sunset reminds her of the beach and the bonfire burning through the night.

She is inexplicably hungry. She remembers white roses on a quiet Tuesday, surprise lilies at a Sunday picnic, snow falling on her shoes and hair. This mournful refrain might be her wedding song, a sobbing, faded photograph set to music. Words wash about her, but she has only some vague awareness of them. A gently bowed head. Someone's concerned hand on her shoulder. She sees only the broken glass on the kitchen floor, scattered among shattered promises, feels only the weight of hurtful words pressing into her chest. Your damn fault. You can't teach me

how to live. She wants the answer to some unuttered question. She wants to go back.

The funeral continues on, like some primitive dance. Do you—can you—dream in that sleep of death? She digs her nails into her palms, forces her eyes wide open until they sting and she cannot help but blink. But she finds herself a coward of conscience, and her tears are trapped behind an inexplicable fear. She wonders what it means to not care. Stop running or you'll give yourself a nosebleed. She dabbles in affected apathy. She doesn't want to go back.



72-year-old, African-American man, Lying in a gurney in the emergency room hallway. Delerious. Mind unmasked by raging infection. He turns and asks "the Romans called him Ulysses, The Greeks called him Odysseus - so who WAS he, really?" Later in the hospital bed, the fog has started to clear. Staff at his nursing home have written "we love him dearly And are holding his bed for his return." That home has become his personal Ithaca.

Notes reveal:

Insightful participant in our poetry group -Always has interesting things to say. Now he is here. Blood overflowing with toxic metabolites, Oriented only to his name -

Is it any wonder

That the chief concern should be, for this man of African descent, Who came of age in a brutally racist century, Who was 28 when they buried Malcolm,

31 years of age when King's body was carried in a long slow procession Back home -

He should re-assert, in the end, A man's right to be more than the names that others call him?

That with almost no other place for his mind to go,



The blackness bleeds into the silence, choking her until she breaks. She stands, a screaming white figure amidst a sea of black, and begins to run. She runs far and fast and away, until there is red behind her eyes. But when she turns back, she sees herself still seated as before, white glove holding an almost-crimson handkerchief. She is at once here and there. She is dreaming in double. She runs to search for the neatly-seamless end, as she once searched within a mirror for the same. What was once there now seems inevitably lost.

What could it mean to not be alive? To end the heartache. To shuffle off this mortal coil. She breathlessly imagines stepping over the precipice, to a world beyond this one. She imagines this as her own funeral. Now she is doing some primitive coffin-dance, while the black all around her watches in ominous, endless silence. She floats away from forgotten almostmemories to cross the distinction between is and was. She is gripped by the totality of the past tense.

She finds herself within the defiant interior of an imagined coffin, which offers no comforts and provides no answers. If this is the end, she doesn't want it anymore, and she begs to go back. The wood offers only apologetic silence. She pounds against it until the whites of her knuckles turn a deep, angry red. She finally tastes the saltiness of her blood-tears. Death might be the vaguely regretful inside of a wooden box.

Daddy, what happens when we die? Well, Sweetie, when we get older, God wants his little pieces of Heaven to come back home.

She awakens from the half-dream to find herself strangely and exhilaratingly alive. She wants to run into eternity. She wants to cross paths with Time as it passes her by. She wonders if it would be possible to live one moment as it bleeds into the next, to capture these moments and create the stuff of dreams. To have and to hold, in sickness and in health. If she could, she might go back. The undiscover'd country. But she probably wouldn't. Another unnoticed death. Another nameless birth. Someone's anonymous white-and-red existence. And so many memories, synthesized only by a timeless fabric weaving on, like some milky wave in a cold and terrified reality.

She might be dying. Or maybe she has forgotten how to live. Perhaps she will try to remember how, even if she can't remember why. For now, she is living a requiem.

FICTION BY CSILLA FELSEN, MS II

Attempted Transformation:

I like the way my new dress looks and feels. Soft, flowing, and most importantly, slimming. That reflection I see in the toothpaste-spotted mirror really could be of someone else-maybe someone who will go out and socialize, someone who can captivate other people's attention, someone who can ask thought-provoking questions.

The lighting is not the fluorescent kind that unmasks all wrinkles but rather is generated by a bluish incandescent bulb that smoothes over my blemishes, even as far as anticipating my nascent pimples. I dust on eye shadow that matches my reddish-brown hair and gloss on some silvery-red lipstick. Blowing kisses at the mirror, I almost convince myself I am truly kissable tonight. That will do.

Goosebumps dot my exposed legs as I step onto the cracked, weed-infested pavement outside my apartment. It probably would have been smarter to wear a jacket with down feathers in it, or at least pants. Whatever. Not worth the effort. Right now the brisk wind makes me feel real because I am aware of my body. Maybe rather than real, I am just fragile. Stupid girl, stop bringing yourself down. I am a new woman now.

I pull my jacket closer and forget about whether my dress fits just right. The tighter the jacket the more it envelops my body, the more I can make my love handles disappear. Much more efficient than the gym. Ouch. I forgot about those, those bruises on my stomach, the ones that prevent me from wearing a two-piece bathing suit to the spa. Thank you Larry.

I will be inside and away from this cold soon anyway; Google maps showed the walk would only be two

miles. The website estimated trip time at three minutes, but now I don't even have a car so it will probably be more like thirty. I had a car for a nearly half a year, but it was not ever officially mine. The car was under my father's name instead since I did not have enough money for it. I still don't.

I made a deal with my parents. They gave me lower interest loans with the stipulation that the car has to be in my father's name until the day I completely pay off my debt. They trust me but they do not trust Larry. Having a debt to my parents has prevented Larry from assuming the money we—I mean I—earn is his to spend.

I fought with my parents at first. Larry put me up to it. He only agreed to my parents' rules when he saw I really did not have the money. My parents were right though. Surprise, surprise.

Larry stole the car a couple months ago, just a couple days after I said we should spend some time apart. I went to work one morning and that afternoon the car was just gone. He stole his first car before he could even drive so I knew immediately he had stolen my car too. I should have anticipated it. My parents pressed charges and he is already in prison for grand theft auto. Right as police were picking him up at a gas station, he tried to speed away and in doing so, he hit a tree, totaling the car. There it went. The lucky jerk that he is, he survived the accident without a scratch.

He still did not escape going to prison though. When he was first taken away, he called my parents' house asking them to drop the charges. "Hell no" is the essence of what my mother said when she answered the phone. So, he is in prison

again.

I sent Larry the divorce papers a couple weeks ago. He proposed to me when he was in prison and he recently received the divorce papers in prison too. Even when life makes a full circle like this it does not mean the circle has substance inside: I still feel empty. He probably does too. Not even my parents can triumph at this failure.

I am not sure if I am more or less alone now than I was at the time I first met Larry. Now I use the Internet, mainly craigslist, to find dates. Just two years ago I had enough confidence in myself to approach people I met randomly in coffee shops, bars, and other places around town. I can't look strangers in the eye anymore. Still, I usually have a date lined up every night of the week just from craigslist. Tonight too. It is my new addiction; well, one of them at least.

The darkening streets do not even bother me. I have been through scarier places, namely when trying to obtain heroin for my husband. I really should just say ex-husband now, but it is tough to shake someone off like that and the paperwork has not been finalized.

He taught me how to get heroin like a true junkie. You really just have to look desperate enough to need it. Otherwise, the dealers can sniff out a fake. If dogs really are supposed to be like their owners, the dogs that smell their way to drugs should be those of the junkies or even the dealers but definitely not the cops. True addicts wear junk clothing, a ghetto look that matches the ghetto environment where the dealers hang out. Addicts cannot afford anything better than thinning sweatpants, sandals with holes in the soles, and t-shirts like what a plumber or construction worker would wear, adorned only with torn and bleached spots. Cops try a similar look. Try but often fail since the designer ripped

jeans and freshly washed shirts they walk the streets with make them easy to identify and avoid. Undercover. What a joke! Even when they throw the signal or speak the secret code— I can't remember it now; luckily it has been that long since I had to play this game—no one bites.

I used to go through this at least once a week when he was in prison. I got the drugs and snuck them to him. When I visited Larry in prison our symptoms were identical. My fear at the person I had become made me sweat as profusely as he did with his druggie withdrawal. It hurt me that much to know that without my help he would experience cold flashes, pain all the way down to his muscles and bones, insomnia, and an alternation between diarrhea and vomiting. Despite not having to endure such a compounding of physical pain, I cannot kick my present addictions.

Here I am at the club: Verde. So typical to let my mind wander that long. Verde. Everything is green, not that rich, natural, grassy green, but the yellowish muted puke color green as if all the people with hangovers have contributed to the paint on the walls. "Head under water/ And you tell me/To breathe easy for awhile/The breathing gets harder..." The lyrics of the song Verde's jukebox is playing would be completely accurate if the club were completely blue, like an ocean or lake or sea or pool...

His back is still turned to me as he speaks with the bartender. He is definitely not one of those antsy types who sits by the door and does the characteristic reflex head-jerk motion in its general direction every time someone new enters. No, this cool cat would probably wait indefinitely for a girl to make the first move.

Maybe he's not the guy. I am still early. Yet, the tattoos on his arms catch my attention. One in the sea

of ink looks familiar—a prison tattoo.

I am out on the street again. Black instead of green surrounds me now, and rather than a sticky alcohol residue greeting my feet with every step, I have crunchy concrete for support. I am not sure what the tattoo means in prison-speak but it is enough of a bad memory to make me not care who I was supposed to meet tonight. Larry had prison tattoos fingertip to fingertip, from his left arm extending all the way across, and down, his back to his right arm. The pattern of ink from a prison tattoo is unlike anything you would find in a tattoo parlor, kind of how their attempts at alcohol, using fermented fruits, are too disgusting for common consumption.

The prisoners have to earn their tattoos with the deeds they do. For Larry to be so well decorated means that he has been quite a fighter. I know he led one of the all-white gangs and some of the markings on his skin are for brutally beating people. He organized a couple prisoner rebellions that the prisoners used as bargaining power against the guards. The ink story he carries on his back must already be helping him rise in the ranks in his current prison stint. That's the real reason the guys endure their tattoo-induced infections.

Any guy who has even a single tattoo matching Larry's array is dangerous. I have had enough dangerous for awhile. After the pleasant evening I had last night meeting a date at the Hyatt Hotel bar, this Verde ghetto is just too depressing. Maybe I should return to the Hyatt bar. Even though I do not have a date waiting for me there tonight, people at a bar that charges fifteen dollars a drink should be classier than at one charging two dollars.

Not Enough:

I heard a jingle approaching before I noticed the clickety-click of her heels. My senses are more desperately alert for a handout than for the people whose hands drop coins at my feet. Still, I noticed her. She never should have gathered the courage to walk down my street so late without an escort. Even three hundred pound thugs have been mugged there. The junkies need their stuff that bad. But, the look on her face was not so much courage as dejected oblivion.

I shook with fear that someone like her, a woman who could live on featherbeds her whole life with the wink of an eye, would have a look like that, an expression more hopeless than my brothers who live with me on the street. She must have interpreted that my shiver was a reaction to the biting wind since she stopped for a moment and looked as if she were going to offer her jacket. It was too thin to have even worked for my toilet paper so I shook my head no thanks.

She reached in her pocket. Maybe it was for a coin, but I caught a glimpse of a pill bottle and again shook my head no. I wanted the pills, but not even the generous people have given me what I really want. And, money from someone as sad-looking as she was had no potential for affording me any good luck.

She lingered a moment, but I had lost patience with this guilty white chick and turned back to re-constructing my cardboard shelter. The wind had just blown it down moments before she first approached. She watched me working for a moment longer but I refused to look at her anymore and did not even notice when her footsteps wandered into the distance.

Almost Connection:

I must have really been determined to reach this new location because here I am at the Hyatt Hotel again, second night in a row. I am not even sure how long I have been walking. My mind did that wandering thing, like an awake sleep, a switch to being more robotic and less aware.

Think. Yes, think I must. Freshen up. Hmmm...I know there is a bathroom just across from the bar. Ok, walk straight to the bathroom, and hope no one catches me on the way. Here I go. Up the escalator. Perfectly clean looking escalator handles. Someone with a cold could have touched them minutes ago, yet they look spotless. The bar is on my left now. Keep head faced forward. No, scan the bar, scope out who is there so I can plan a trajectory while in the bathroom. Failed.

"Oh, hi," the guy I met up with last night mumbles.

The Hyatt should be bigger than to make a chance occurrence like this reasonably possible. I look around and verify from the number of floors in this hotel, fifteen or sixteen at least, and from the hallways that stretch beyond where my eyes can see, this meeting should be impossible. He seems about as shocked as I am, though maybe a little scared. Time to put my game face on.

"Hi. How are you?" I ask in a flirty invitation for him to make the next move. Last night was fun and I would not mind a repeat but it was not so amazing that I will settle for the same experience if he is unwilling to be assertive.

"Oh, uh, good. I was just about to uh turn in. You know it's been a long uh day and I uh am tired."

Lame. Good thing I did not risk seeming too desperate. Yes, do go away, I want to tell him.

"Sleep well," I mutter curtly, my eyes already darting over his head and across the bar to scope out my next move.

"Yeah, thanks, I uh hope you uh have a nice uh night too."

I wave goodbye and snake my way through the bar throng. No one looks interesting in this first scan. Maybe I should not have dismissed the guy from last night so guickly.

Decision time. Sit at the bar counter sandwiched between two girls chatting and a guy and a girl leaning into each other or go to one of the empty couches and try to be more inviting. Ahem, Jeopardy music please. Ok, if I already ditched the guy from last night, or rather, he ditched me, I should avoid other repeat experiences. The couch it is.



No Laxatives:

Maybe once a month I see a girl like that walk into my store, dressed like she should be at a fancy party. They never look convinced they should be here either, the dim-fluorescent lighting far from optimizes their makeup, makeup that cannot even mask their bewilderment at finding themselves sardined between shelves of junk food.

This one actually sought out the junk food, piling cookies, chips, and candy in her basket and then darting for the medicine supply.

Five customers later her dejected face turned up at me to ask if I had any laxatives left. "No, I forgot to fill an order for them this week "

Her immediate response was to return to the medicines and grab two bottles of Tylenol before going over to the alcohol counter. She hesitated, checking that there were no other customers around before admitting, "I have never tried alcohol before. What would you recommend?"

"Well, it depends. What are you going to pair it with?" I asked slyly to buy myself time.

"I haven't decided yet," she responded, eyes averting back to the pill bottles.

"Well, have you ever heard of ale, namely the ginger

kind? It goes with anything."

"Ok, I will try some then," she accepted a bottle of ginger ale from me. I kept up the charade by asking her for ID.

"Good luck with your headache," I said to let her know I was aware of how many pills she planned to buy. "You know what helps best for a headache?"

"I don't really care. This will do the job."

"Well, when I have a headache I can't shake off, I take a special drug that is so strong you only need to take one pill in a twenty-four hour period. More than one pill is just way too much."

"Really?"

"I'll go get you a bottle from the back."

I filled one of those generic white-capped orange prescription containers with Red Hot candies and brought it over to her. She was so eager to get the pills that she paid. the bill and left without checking the contents or smelling that her ginger ale did not actually have any alcohol.

I wrote a reminder to get more laxatives, hoping that if my daughters ever reach a low point like hers, some random stranger will be kind enough to deceive them too.

Empty Couch:

Red couch, crisp and leathery. The sagging attempt at a red couch in my apartment—crumbs between the cushions, punctured holes in the pillows, and splotches muting out the original vibrancy of its color—is pathetic by comparison.

I can drape on this bar-couch like Cleopatra. I don't have much of an audience though. Group A is a bunch of married guys over seventy all slowly drinking the same brand of beer and reminiscing over college days; Group B a giggly bunch of girls fidgeting with the stems of their Cosmopolitan drink glasses and comparing nail jobs; Group C two couples out on a double date taking turns drinking shots and complaining about work; Group D some guys pounding their fists on tables depending on the score of the ESPN basketball game; and a couple others, all already occupied as well.

I do not know what to do with my hands so I grab a drink menu. If I wait it out long enough one of the guys here may sit with me on the couch and offer to pay. While holding the menu, I pat the seat next to me and search the groups again, trying to spot any newcomers. It looks like the waitress is going to beat that potential dream guy and ask to take my order before anyone joins me. In still more of my repeated scans of the room no eligible men are looking my way. Ok, fine, the drink menu calls.

I don't actually drink though. It used to be easy to explain why not when I was under twenty-one since all my friends just assumed that the same part of me that would not jaywalk, even when no cops were in sight, would also just not let me drink. Now I have to pull bartenders and waitresses aside when I am in a big group to whisper in their ears that I want a rum and coke, hold the rum. Or, if we are all ordering in front of each other I still ask for a rum and coke, but then I always pretend I need to run to the bathroom right after the waiter or waitress walks off so I can ask that the rum be left out. Tonight though I can look at the non-alcoholic drinks without shame. Instead, I keep looking at the empty space next to me on this big couch.

The waitress brings my virgin strawberry daiquiri nearly as soon as I ask for it. She seems to understand that I need it as a shield against the looks from other women in the room who seem to be hinting I am too optimistic in choosing a couch. Fifteen minutes and no one has approached except for the waitress whose job it is to approach people and bring them what they ask for. They should have friends ready-for-order on the menu.

I purposefully twist my straw a couple revolutions before taking a sip. The hint of lime and freshness of the strawberry flavor would almost make the fourteen dol-



lars for this drink worthwhile. I will savor it slowly not just for the taste but because I want to earn my seat on the couch with a single drink.

The hotel ambience is stunning. Larry promised me we could live in places like this that are three hundred dollars a night, or more, anytime I want. But, first, he would say, my big gig just needs to come through. Next week baby, I promise. And then the one after that. He was the drummer of a platinum record band a couple decades ago. Platinum band drummers who discover heroin have nothing to show for their work in old age except for lofty promises. The first couple times I threatened I would leave him he said it would be stupid to go when he is just weeks from making a big breakthrough performance; he said that we would soon be going on month-long tours of Europe, living in five-star hotels, and consuming lobster like it is as cheap as the Ramen noodle soup we have for dinner every night. I don't want to live in a sterile environment like this hotel anyway, but it would be nice to have reliable heating and to not fight off cockroaches every night before giving up and falling asleep. I could stay here for a night though, if someone staying here actually tried to get to know me, or the fake me.

New dress, new attitude, and I still cannot manage

to break outside of the person I was before coming here. Even if I were desperate like the homeless guys who shove their cups in my face as I walk by them on the streets, I probably could not make myself sleep in the bed of a perfect stranger just to be in a fancier place than what I can earn for myself. I thought being near rich people would inspire the transformation in me, but being surrounded by all these strangers only makes me emptier. They are all talking in fun groups, and I am still sitting by myself, alternating between looking at the chandeliered ceiling and the lush maple floor. I am too scared now to let anyone catch eye contact with me.

"May I pay my bill, please?"

"Sure," the waitress says. She pauses for a bit, staring at my face before whispering, "Are you a famous singer? Like a Grammy award-winning singer?" As I shake my head she still presses the issue and says, "You are welldisguised and I won't tell anyone if you admit that you are famous. I've seen your picture all around People magazine. That's a smile no one could forget!"

"I can't even sing."

"You don't have to be so modest. I love your songs. Would you mind autographing a napkin for my niece?"

"I can't sing," I assert a second time, already beginning to walk away.



Captivating Distraction:

She planted her legs, one after the other, with energy and purpose that sent the silky folds of her skirt undulating. Shiny black heels made her calves bulge. She gave life to her hair with a single flip her of fingers. Simply exquisite.

"Hey, I think I lost you for a moment," my colleague snapped my focus back on him.

"Oh, um, sorry." I lost sight of her as he and I resumed talking work nonsense. When he finally decided to turn in for the evening, I scanned the room for a glimpse of that lovely woman.

This time she was languidly draped over a silver-trimmed red couch near the entrance, as if just waiting for some new stranger to walk in and notice her. It took a full thirty minutes of staring her down for me to discern the color of her eyes, her eyelids spent that much time veiling them—shimmering bronzed eyelids, each accentuated with a single line of black eyeliner, merging with full, dark eyelashes.

Her lips, color-matched with the couch as if she planned all along to settle there, alternated between a reluctant, quivering smile and a desperate pouting. Every now and then she saved her mouth from this awkward dance by taking an effortful sip of a mixed drink, maybe a strawberry daiquiri, or by crunching on a couple pretzels at a time,

the crumbs rolling down the front of her little black dress. Sometimes she occupied her fingers by twirling the cherry in her drink.

I prepared to approach her by gulping down the remainder of my Guinness. My clumsy attempt to confidently place the empty glass on the bar countertop made it fall to the ground. By the time this distraction subsided, my greatest distraction for the evening had already left. I carried out my initial intention to walk towards where she had been seated before. The cherry was all that remained in her drink glass and there were only salt crystals left in the pretzel dish. They may as well have been empty for the pit in my

Feeding Failure:

That feeling when no one, not even yourself, cares what happens to you is something I can claim right now. It is darker outside than before and chillier. Those are not the feelings I care about; they are too tangible and too easily remedied by going into a brighter, warmer shelter such as turning right around and walking back through the doors I just exited. Instead, I need to face the meat of my life.

There is a drugstore open just across the street. That is definitely a bright spot. It will help me feed one of my addictions.

Larry used to try on my clothing, mainly the jeans that were the tightest on me, to show it was all baggy on him. That was supposed to be my motivation for losing weight since size six is just too big for a girl, especially the wife of a rock star drummer. He would do this in the midst of shoveling more scoops of ice cream into his mouth and telling me I am too fat to eat any of it, even after I shrank to a size zero. Zero. Nothing. Much less of me to love. The varieties of brown spots on our carpet correspond to the assortment of chocolate ice cream flavors Vons keeps in stock. Well, that and the cigarette butts he was too lazy to empty in our ashtrays. Some of the rust color on our carpet is from wounds I would rather not admit to having endured, from times he threatened to kill me. I always told him we should not get white carpet, but he promised to be clean and civil,

not savage. Optimistic words make empty promises.

I grab a basket and fill it with two half-gallon containers of fudge brownie ice cream, three boxes of Oreos, a couple bags of Reese's Pieces, and handfuls of other foods, like Pringles, that Larry would flaunt in front of me and over my head.

There are no laxatives in the stomach problems aisle. And, there is a long line at the checkout, but I would have to wait through it anyway, even if I already had my prize by now. I wait and play a game of assessing the contents of everyone else's baskets, comparing their fat distributions to what they are buying to determine which foods are inner-thighs foods or arm fat foods, until it is my turn.

"Do you have any laxatives?" I find myself whispering, as if I were asking to have the coke without the rum even though there is no one else in the store anymore.

"No, I forgot to fill an order for them this week."

This is completely useless now. I cannot eat all this junk food without the laxatives. It is too hard to make myself throw up these days, and then I just gain the weight of all that junk when I fail to purge. Besides, I never have been able to maintain a size two with just bulimia.

Ok. This is it. I planned it all before and the circumstances tonight really make it seem as if I am ready for it now. Tylenol. Two bottles. Check. Alcohol, alcohol. Other customers? No, no one around. Ok.

stomach.

"Are you the one she was waiting for? You certainly made her wait a long time," the waitress judged as she approached to clean up after the girl. Not waiting for a rebuttal, she asserted, "I thought she was a famous singer."

"Which "

"But she profusely denied any ability to sing," the waitress interrupted, continuing in a monologue with herself. "Maybe she was just being humble. If you think she is going to return, could you help get me her autograph? She is famous, right? I mean..."

Useless conjectures! This time I interrupted her by leaving. At least silence in my single room was more comforting than vapid conversation.



"I have never tried alcohol before. What would you recommend?"

"Well, it depends on what you are going to pair it with?"

Please stop hesitating, sleazy storeowner. I just want the drugs and to get on with my life.

"I have not decided yet." I wonder if he honestly expects me to admit I want the alcohol to wash down all these pills.

"Well, have you ever heard of ale, namely the ginger kind? It goes with anything."

"Ok, I will try some then," I say just to hurry him up so I can get out of here. I flash him my ID and am ready to run out the door.

"Good luck with your headache. You know what helps best for a headache?"

Shut up already! "I don't really care. This will do the job."

"Well, if I have a headache I can't shake off, I take a special drug that is so strong you only need to take one pill in a twenty-four hour period. More than one pill is just way too much."

"Really?" Oh, I really want something more effective. I never could wash down pills very well and I am not sure I can tolerate alcohol in any large quantity either. And this just has to work. I do not like failing in anything, and now is especially not the time. It is just too difficult to tolerate

failure.

"I'll go get you a bottle from the back."

I pay him and walk out, leaving the basket of ice cream and other goodies behind without caring to put all of them away for him. The special headache pills look strangely like Sudafed, but I am going to wait till I get back to my place to try them out. I don't want my body found in the street next to all the homeless guys I am passing.

I want to give one of them my jacket. I don't need it anymore and he is still awake, fixing up his cardboard cottage. In the afternoon, they were pulling the bits of cardboard boxes out from cracks between buildings, and now all of them are hiding in doorways behind their contraptions, except this guy.

I'm cold. He must get cold on a regular basis, never able to warm up. He probably has to go completely numb to that coldness before he can fall asleep.

Maybe the jacket is too girly for him; he won't accept it. I must have money, some change left over from getting my stash. I won't need the money anymore either. Maybe he just wants drugs, or whatever he is addicted to, but I have nothing else to offer. Useless, I am completely useless again, rejected by a bum.

No Cheating:

I was exiting the bathroom when I saw the girl I met last night through craigslist.

"Oh, hi," I suppressed the urge to ask her what she was doing near the bar of the hotel where I was staying. I already knew she did not have a room there too, and I wondered if she were there specifically to see me or if she was already meeting someone new.

"Hi," she said with an eager vibrancy in her smile that I did now know how to interpret. She could have been super excited to see me, or just high on the energy from already having a stellar date with someone else. "How are you?"

"Oh, uh, good. I was just about to uh turn in. You know it's been a long uh day and I uh am tired."

"Sleep well." Her smile was still plastered but her eyes were not as bright anymore.

"Yeah, thanks, I uh hope you uh have a nice uh night too." I avoided her eyes. Even when I walked off, I walked with my head down and only snuck a glance back in her direction when it was too late to trace where she had gone.

If she had been stalking me that would have been exciting. But, even though her presence brought me such an amazing tingling all over I could never admit it. My girlfriend back home would not have approved of the late night têteà-tête I had with this beauty the night before. We had talked for five hours that night, sitting together at the bar countertop, and I wished during every minute of it that I had the nerve to try and bring her up to my room. When I thought of the many ways in which I could have invited her up, I tried to convince myself that there was no physical chemistry between us, just a profound intellectual connection. Luckily, my shyness won since I was no longer so thoroughly convinced that the physical connection was actually nonexistent.

When I got back to my room I only had an email from my girlfriend to which I could look forward. Much comfort a cyber connection serves in the face of the overlooked opportunity to be close to a warm body.

I called room service, imagining the body type of the girl who would deliver the food and how I may convince her to kiss me. No, I knew in the moment that I let the girl from last night walk off that I really was not meant to be a cheater. Besides, it was a man who showed up to bring my food.

Another Failure:

I have my phone at my side, ready to call someone when I reach that final moment, a last second shout out to all those people who abandoned me in my hard times. As I look at the pills and ale, this no longer seems like the end of the line.

I never liked the smell of alcohol before but this ale with ginger in it has no smell compared to the stale stench of cigarettes and grime in my apartment. It would take an awful lot to get me drunk enough to forget this mess. I find another needle sticking out of the couch cushion, another one of Larry's goodbye presents. More drug paraphernalia is lurking and waiting for me in other corners of the apartment, I am sure.

There must still be more out there in the world for me to do than to sit on my stained carpet. I passed through Arizona a couple times, saving the Grand Canyon for later. When I went to Paris, I did not go to the top of the Eiffel Tower. I kept souvenirs for a scrapbook that I still have not pasted into the empty pages. I never made snow angels or saw a lion do anything but sleep at the zoo. I have not seen a full game of football or learned to ride a bike.

There are just too many things I have left undone, things that I do not need other people to be carrying me through. I just need to make a list, a list of everything I have to go through before I am ever allowed to be in this state again.

I just need a goal.

With One of These and Ten Cents, You Can Buy a Cup of Coffee

BY D.P. REX SKELLETT

Packed in an old shoe box, Hidden under forgotten joys and broken toys Are items that are under lock. Bound with tape and jute for all to avoid. Articles not worth keeping Just objects of silver, bronze and gold. They lay scattered about sleeping Along with faded ribbons and crumbling paper scroll. Packed away years ago To rid the sickness of battle fear Somehow in the garbage I couldn't drop No more than I can stop a silent tear. No they weren't tossed away For often I think back Reminiscing those far-off, cloud-over days And I remember laughing flags, snapping in the wind So maybe in years to come I'll find those items I hid And brush off the dirt and scum,



And smile a wicked smile of the damndest things I did.

Suicide Girls are lost at sea with razorblade paddles to sift through the debris.



BY HYUMA LELAND, MS III

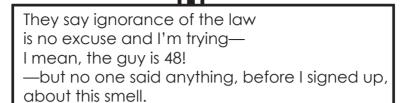
Their lungs fill with fluid, choking out a last breath like a belt cinched down round the neck.

Suicide Girls are looking for the next high, or low. Testing the warmth with the tip of a toe.

A violent rape – A handful of pills. A family's scorn – A knife down the forearm. A grandmother's death - A rope around the neck.

A handful of pills.

Suicide Girls are looking for the next high, or low. Testing the warmth with the tip of a toe.



You would hold your breath, frown, shake your head, scurry quickly past, if it arose up from some trailside possum sun warmed, bloated and boiling over with maggots.

We smile through it, huddle close by the bedside. Query in tender, hushed tones aive antibiotics & insulin, try to distinguish stupor from withdrawal: "C'mon Ted, gimme a growl. C'mon."

We dropped by rads to view the scan; they were rather subdued by the findings. Even I walked out mute, thoughts directed at jostled viscera so my resident summarized, blithely, straight-faced: "Calcifi-kaaay-shun of the peee-nis, free air in the skeee-RO-tum."

I laughed so fucking hard I cried on my shirt: five minutes, I'm not kidding; my goddamned belly hurt. Whew.

The surgeons left him a vulva— I could see it from thirty feet away —because I went to visit and they left the curtain open but I didn't say hi so as not to wake him.

BY IAN JENKINS, MD

MEMOIR:

THE VOYAGE MERCY

BY PETER BLUVAS, NICHOLAS KANAAN, RYAN YOON, MD, CLASS OF 2009

INTRODUCTION

ete Bluvas, Nicholas Kanaan, and Ryan Yoon represented UCSD Medical School during the 2008 United States Pacific Partnership aboard the USNS MERCY (T-AH 19) – a 900 foot oil-tanker converted into a 1,000 bed hospital. This partnership was staffed by the coordinated efforts of multiple organizations, including the US Navy, Marines, Army, Air Force, and Public Health Service; Armed Forces of the

Philippines, Australia, Canada, and Japan; Regional Health Officials and Local Health Care Providers, Operation Smile, and 13 local NGOs - of which UCSD was one. The collaborative provided humanitarian aid in the form of surgical, medical, dental and ophthalmological care, as well as providing onshore building and infrastructure support, which helped improve foreign relations and diplomacy throughout the South Pacific. The mission was carried out in the following destinations: Coto-



bato, Samar, Manila (Philippians), Nha Trang (Vietnam), Singapore, Dili (East Timor), Darwin (Australia), Port Moresby (Papua New Guinea), Chuuk (Micronesia), Guam, Pearl Harbor, and San Diego (USA) over a five month period.

2008 AUGUST,

May the Voyage Begin

oday we touched down in Port Moresby, Papua New Guinea (PNG) on a flight from Cairns, Australia that was excessively early in the morning. The three intrepid voyagers slung our carry-ons and walked up the walkway to our twin-engine prop plane ride to PNG. The views of the Great Barrier Reef were spectacular, and on descent, seeing the rain-forested landscape of PNG for the first time piqued our excitement.

A man carrying a sign with our names on it greeted us at the airport, and we were driven to the dock and boarded the USNS Band-aid: a small boat that shuttles people and equipment to and from the USNS Mercy, which was docked within the marina and not accessible otherwise. We jumped on board, along with about 14 locals who were boarding the boat for medical care.

A four-year-old boy with the biggest grin on his face sat next to me on the bow of the boat, giggling every now and again when we got rocked by a wave. He had the normal look of a boy who played in the dirt a bit more than his parents probably wanted. He was short and skinny, with a continuous amount of snot that rolled along his sun-chapped cheeks that he wiped off occasionally with his sleeve. He didn t say a word, just looked up and smiled at Pete, Ryan, and myself, seemingly intrigued by our light skin and American-ness". His left hand, I noticed, was severely constricted with scars and contractures to the point where he essentially had no functionality. It lay in almost a fist-formation that he tucked deep into his over-sized jacket sleeve. I heard that many of the surgeons had already made their pre-op visits, so he must be coming on board for hand surgery to improve his hands functionality. He was just one of 14 on the Band-aid boat, with dozens of trips back and forth to the Mercy like this every day.

His father sat by him. Dark skinned, tangled hair, his shirt stained and with evident wear and tear, yet he had a look of pride on his face. Pride and hope. His child was going to get the care he might never get in PNG, and he would be there for his child, making sure he can have the best life possible. It was a priceless moment, one of silence and with the exchange of only smiles. Around us was the din of the boat engine and the shifting of passengers as waves crashed against our hull, plowing ever forward towards the Mercy. Once we docked alongside the ship, the father hopped out of the boat and I lifted his child up to his arms. I wanted to say something, like "good luck" but nothing came to my lips. Before I knew it uniformed crewmembers directed us where to go and what to do, and I lost sight of the father and son.

We received our "berths" [read: bed and room assignments] and are now trying to get situated. Soon we will be briefed on our specific roles and responsibilities

on the ship and which teams we will be working with. In the mean time, we re just trying to keep ourselves from getting lost within the winding corridors and colored stairwells of this huge ship!

May the voyage begin!

Bon Voyage, ~Nic

In the NAVY Now

ow, this is one incredible floating, working, functioning town. I entered this town as an outsider, not knowing the slightest about nautical terminology, military protocol, or how a ship this large functions. So I d like to share some of the things I ve learned along the way.

The concept of the USNS MERCY (T-AH 19) is not novel; in fact there is a long line of predecessors that lie in the veritable wake of this white-washed hospital ship with a red cross stamped on its hull. There were two previously commissioned Mercy ships as early as 1918. The tradition traces back to the first commissioned ship for hospital purposes, the USS Red Rover, which sailed from 1862 to 1865. This hospital aid ship proved to be a benefit in the field, and subsequently spawned a whole series of ships.

Inspired by the "Prayer From the Navy Wounded" that Navy Commander J. M. Stuart wrote while stranded and wounded on a tropical island, each ship then on was named from words within this prayer. It reads:

I am wounded, lying in the tropic of darkness. Who will deliver me, oh, God? Is there no HOPE? *Is there no present SOLACE from the* flame that burned me? No Heaven-Blessed RELIEF for aching steel-torn flesh? Surely the All-highest in His SANCTUARY, He who is my ever-present CONSOLATION, My REFUGE who is BENEVOLENT indeed, Will send me one SAMARITAN to bind



my wounds, For I have sang His MERCY log as Christians should, Have known him BOUNTIFUL, yea, my enduring life, Have dwelt before Him in old Faith's TRANQUILITY, Rescue me, Lord, COMFORT me in my deep stress. Salve my wounds, bear me up to some sailor's HAVEN On to the sweet REPOSE that Thou has promised me!

~Pete

Settling In

wake up late and rush to catch the end of breakfast. Then, I head to the OR.

The plastic surgeon I worked with the day before is there. I reintroduce myself and soon I am suited up assisting with a cleft palate repair. During the procedure all sorts of medical and dental folk wander into the room. They ask questions of the surgeon, and push to get a good view of the procedure. They talk shop.

At dinner I meet more people: military personnel, Project Hope doctors, predental volunteers from San Diego. The hot topic is everyones experiences from the away missions: hundreds of patients seen by five providers; arriving at a clinic site and being greeted by thousands of waiting, cheering patients, such that it feels like finishing a marathon; stories of regret for the hundreds of patients left waiting in line at the end of the day that did not get seen, some of whom had been waiting since 3 am.

All of the returning away mission personnel look tired, but they are all happy. They are living the dream. They just spent a day toiling at the thing in life that they are passionate about. The thing they spent thousands of dollars in airfare and months of time away from their families to be a part of.

I will not be participating in any away



missions for four more days. I am frustrated and I am disappointed. Then I am mad at myself for thinking these things. This isn't about me. It's about all those people waiting in line to be seen. I resolve to prepare myself as best as possible for when I finally get to go off-ship. Someone from dinner said they saw 60 patients. I will see 70. Hell, I will see 700 if they would let me.

~Pete

On Silence

r. Plarr was a good listener. He had been trained to listen. Most of his middle class patients were accustomed to spend at least ten minutes explaining a simple attack of flu. It was only in the barrio of the poor that he ever encountered suffering in silence, suffering which had no vocabulary to explain a degree of pain, its position or its nature. In those huts of mud or tin where the patient often lay without covering on the dirt floor he had to make his own interpretation from the shiver of the skin or a nervous shift of the eyes.

Gr aham Green, The Honorary Consul

I have often found that many of the patients in the poorest situations have been difficult to communicate with because they would not volunteer information, would not express their complaints. I never knew if they lacked communication skills, or if they simply did not wish to speak or complain. In the case of non-English speakers, it could have been the language barrier.

This has also been very true in this part of the world. In Papua New Guinea, one of the pharmacists remarked about how stoic the people in this country are." People will have suffered incredible injuries or illnesses, and will not express what I would have considered "the appropriate amount of concern." One lady complaining about a headache didn't even want to mention to me her huge draining abscess-looking thing on her index finger. I, of course, freaked out. Her response was something like, "Yeah, it hurts."

Initially, I thought: I guess these people would have to be stoic to put up with all the difficulties they deal with. This includes having to walk everywhere for hours at a time, the resulting knee and back pain, not having enough fresh food available, a failed social services system, the terrible, terrible heat and humidity, lack of sanitation, high crime rates, etc. However it has come to my attention that this subject has been thought about before, and I can put it no better than Paul Farmer:

"You don't have to be a doctor to know that the degree of injury, of suffering, is unrelated to the volume of complaint. I have seen the sullen, quiet faces in waiting rooms in Peru, say, or in prison sickbays in Russia. Members of any subjugated group do not expect to be received warmly even when they are sick or tired or wounded. They wouldn't expect Dr. Plarr (from above) to invite a long disquisition about their pain. They wouldn't expect the sort of courtesy extended to the privileged. The silence of the poor is conditioned. To describe as stoic is not to be wrong, but rather runs of the risk of missing the great eloquence beneath the si-

--paraphrased from *Pathologies of* Power

~Ryan

PNG: Lost in Translation

y goal for today was to see greater than half as many patients as the ER doc I was working alongside. I was really in the flow and rhythm of seeing patients, when a man with an unusual problem came to my table. He was very shortstatured, probably no more than five feet tall, and his body was childlike while his head was normal-sized and fully-matured. In medicine we would say that he looks "syndromic" meaning that he probably had some sort of genetic or congenital disorder leading to problems within multiple organ systems, not unlike Down's syndrome. If you ve ever seen anyone with Down s you would probably agree that they have a characteristic look. However, since there are hundreds of these syndromes and they are tough to remember, only a few physicians who are experts in identifying these disorders remember them all. The rest of us just say the patient looks "syndromic."

So, the patient sits down and I ask him if he takes any medicines. He does not respond, at which point the translator intervenes and tells me that, This patient is deaf and mute," and so he cannot speak or understand me.

"OK, fine" I say. Then reflexively I switch to using the translator mode. Can you ask him what medicines he takes?" I say.

The translator then proceeds to act out my question to the patient without using sounds, as if he were playing charades. He motions about putting things in his mouth, presumably to mean taking pills. Satisfied that he was understood next he points his index finger at the patient indicating that he wants to know if the patient takes pills.

The patient nods in understanding and shakes his head "no".

"He doesn't take any meds," says the translator.

~Pete

SEPTEMBER, 2008

My New Haircut

went to the barber shop today. I was getting a bit hirsute in the facial department and my hair was out of control to the point where I had to buy a jug of hair gel to keep it under wraps. So you could say I was overdue for a trim. I walked in, sat in the nearest barber chair and the guy turns to me, "okay boss, what would you like?" Just a little off the top to tame it down a bit, and the sides can be trimmed quite a bit," I replied. He turned to get his equipment ready and I strained to get my head in the line of sight with the mirror across the room that didn t quite line up with the chair. He started with the sides; hair was falling onto my shoulders and sliding down the drape with each stroke of the shaving shears. I strain a bit more to see the mirror it looked great. He started making his way up to the top of my head, hey boss, you want me to even this out for you?" He asked. I replied in the affirmative, while thinking to myself, well, of course, I m not really looking for a lopsided or asymmetric haircut here." That must have been code for something that was lost in military to civilian translation because the next thing I knew he took a swift and broad stroke with the clippers in the mid-saggital plane. I couldn t object too late. A negative mohawk was created in one fell swoop. He must have sensed my terror, "is that okay, boss?" "Yeah, sure. That's even alright," was all I could say. He continued to mow down the rows of long hair remaining, and in doing so he rotated my chair about its axis about 90 degrees.

At this vantage point I was staring directly at a sign no further than 3 feet away that had in big block letters, "MILITARY HAIRCUTS ONLY." I couldn t help but laugh.

Bon Voyage, Nic

First time out in Micronesia

ts day nine of twelve at Micronesia and this is my first time off the boat. I actually haven t even been outside in four days. The water is glassy and calm. The launch is nothing like PNG. We easily climb aboard a series of small, ten-person, locally chartered "water taxis," which apparently are the mainstay of transportation in this area. Two-person teams drive each boat. One sits in back steering and managing the twin Yamaha outboard motors.

The other stands in the bow area holding a rope. I could never get an answer as to why they had a guy standing up front, but it did make for quite an interesting scene. For some reason it reminded me of all those old paintings of George Washington crossing the Delaware. And so we set out in a way that only America could.

We pass several islands on the way out. You can see small seaside huts or shacks dotting the otherwise undisturbed tropical landscape of beach and palm trees and steep volcanic hills. We pass some seaside caves where the Japanese hid during World War II. There are at least a few totally uninhabited islands that would only take about ten minutes to circumnavigate on foot.

We pull up to a small concrete dock with a rotted-out building frame that looks kind of like a greenhouse without the plastic. The water is ankle-deep and there is coral, rock, and seaweed everywhere. We unload the boats, passing the gear along a chain of people, and we are here. America is here. On shore there are perhaps a dozen ten by ten shacks made of tin nailed to a wood frame. There is a small graveyard with just five prominent mausoleums. Except for clothes hanging out to dry on one of the shacks, this area doesn t seem to be inhabited. We walk fifty yards inland, and find ourselves in a grassy clearing half the size of a football field with an L-shape of simple concrete buildings forming two of the sides. This is a school and a schoolyard. There are about six classrooms with large windows with wire mesh instead of glass, a decent number of desks and some rather filthy chalkboards. The only books to be found are a shabby looking pile in one of the rooms. We setup our various medical services in each of the rooms, and its game time.

The weather today is hot. I tend to sweat a lot and its just outright embar-



rassing now. My shirt is soaked and I am just dripping sweat on everything. My body would adapt to these conditions if I kept living in this climate, but that doesn't do me any good today. I unzip my REI convertible pants revealing my khaki dress socks and black shoes underneath. It's a look that only really cool, yuppie white guys can pull off, and that's definitely not me. That's the "doctor" these people get to see when they come to my table.

My most interesting patient of the day is my first. His complaint is "neck mass." One glance at him reveals that it is a thyroid tumor. I plead his case to the commanding officer and several iridium cell phone calls later he is scheduled to go to the boat for an ultrasound and possibly surgery.

Im trying to keep the cynicism out of my posts, but I can t help myself here. Clearly this guy was sick. Anyone off the street could look at him from twenty feet away and know that he needed medical care, but how about the lady who has been having heavy, painful menstrual periods for the last two years? I couldn t check her for anemia (the weather was so hot our lab kits stopped working) but I d bet a thousand

dollars it was probably pretty bad. She looked and acted fine, except for a little weakness and so she did not get a trip to the boat because it would have been hard to convince people that she was sick just by looking at her.

So I guess my point is that we probably overlook the more subtle medical issues when we decide who gets more extensive care. I bet we do this in the States as well, but probably to a lesser degree because healthcare providers are educated about those subtle signs of disease and they are supposed to have an idea of what is sick and what is not sick.

The other interesting thing on this island is that the people don t get along so well. I saw several patients with scars from stab wounds. I guess there are eight or so "clans" who don't like each other and they are constantly getting in little scuffles. That's really not so different than my family at a holiday get-together, except none of us has stab wounds to show for itwell, not yet anyway.

~Pete

Genetics and Happiness

s soon as the mother with her daughter came in to see me, I was searching my memory for pediatric and genetic syndromes. When I asked what's wrong, the mom replied, "Oh, she is fine. She is a happy girl." The mother was the one with complaints of gastrointestinal upset

We unload the boats, passing the gear along a chain of people, and we are here.

America is here."

and musculoskeletal pain.

After addressing those problems, I switch gears to talk about her daughter, and find out that the child is being well taken care of, meeting milestones with slight delay but progressing well, is eating well, and interacting with others. She was such a beautiful girl, smiling at me from across the table. She was curious, inspecting the stethoscope as I listened to her heart and lungs. Her dexterity is limited to pincer grip on account of her fused fingers; nonetheless, she seems to do just fine with some adaptations. Throughout the exam the child was interactive, smiling, and happy as any other.

My first guess (and without the luxury of further testing or a textbook reference) was a genetic defect called Treacher-Collins Syndrome, known as mandibulofacial dystocia (meaning multiple cranial and facial developmental abnormalities). Initially, I thought this because of her macrocephaly (large head) and proptosis (bulging eyes), but that doesn't really explain fused fingers and toes. On further review back on the ship, I m thinking more along the lines of Apert Syndrome or acrocephalosyndactyly [read: hand and head bone fusions].

I pontificate and regurgitate all of this simply out of curiosity. I wasn t able to give the mother a name to her daughters diagnosis at the time, nor am I positive this is correct. In a lot of ways it doesn't matter. In the US this child would be followed by multiple specialists: neurologists, surgeons, ge-

> neticists, pediatricians, ENTs, ophthalmologists, dentists and orthopedists. Here she has only the family doctor that she hasn t seen in the last year or two. But sometimes it's not about fixing every problem we see, taking every child and making them look and function like every other child. We could not dream of providing such services and long term care for her: we simply will not be here long enough, nor do

we have the resources to do all that would be done in the States. But we have to remember what is most important. For this girl, a happy life with a supportive family and community is the best prognostic indicator that we can assess. Her hope relies on the smiling faces that surround her rather than serial intracranial pressure monitoring or ventricular shunting surgeries that could be done.

Oftentimes we see these children and think to ourselves, "How horrible!" And its true, it is a tough lot that was given to her, being different from her peers. But she is in many ways more similar than different. Her mental abilities and cognition are delayed, but that likely has a positive effect on her level of happiness. It s hard to look past appearances in life and see beyond our first impressions. The outside world can be cruel and difficult, but this girl is growing up in an incredibly supportive and loving family that takes excellent care of her. She is lucky to have such great parents, and they are just as lucky to have such a sweet little girl. I was so happy to see her today, to know that her mother was not embarrassed to bring her into public, to know she is being well cared for, to see that the child is happy and interactive and to have gotten to know these two for the brief time that I did.

There are times when you don t know what to prescribe. For me this happens guite a bit, but often I can pull out my Pharmacopedia or Sanford antimicrobial guide and get a professional opinion. There are other times when there is nothing you can prescribe to make things better. This was neither of those times. This time, it was a sour apple and watermelon Jolly-Rancher candy, which brightened this beautiful girls day.

Bon Voyage, Nic

A hard day s work

his is my second off-boat experience in Micronesia. The destination is one of the outer islands." The population is 700. No, I didn t forget a zero there. We pull in to a crumbling concrete dock next to a beautiful, simple seaside church. Our clinic is again at a school, this one smaller than the last and having only four classrooms. My job today is not to be a provider but to work as a Hospital Corpsman. I will take vital signs (blood pressure and pulse) from all the patients seen in the clinic. There is a Navy Corpsman, Ray, working with me. I am actually looking forward to this, as I won t be under any pressure to make any real decisions about patient care; it will be a much-needed break for me.

The day drags on. After checking in

what seems like one hundred or so patients I check my watch and it is only 9 am. Luckily, the weather is cooler today and I sweat less. Many of the locals bring me fresh coconuts (which are delicious) and that helps me through. And so I make it through the day, having seen roughly half of the 400 patients that came through the clinic.

It surprised me how good I felt after having put in a hard days work. This was in stark contrast to how I felt after many of the days where I worked as a provider seeing patients for their medical complaints. Today I had a straightforward job to do and I did it well. I could see the line of patients waiting and I made it through all of them that were checked in. With each customer I had the sense that they would go on to receive good care from our team of providers. I had time to pause and look around. I took breaks to eat coconuts. I saw the Navy's band play while the people danced. It was very satisfying.

~Pete

The quality of mercy is not strained; It droppeth as the gentle rain from heaven upon the place beneath. It is twice blest; It blesseth him that gives and him that takes.

Tis mightiest in the mightiest; It becomes the throned monarch better than his crown. His sceptre shows the force of temporal power, The attribute to awe and majesty, Wherein doth sit the dread and fear of kings; But mercy is above this scept'red sway; It is enthroned in the hearts of kings; It is an attribute to God himself, And earthly power doth then show likest God's When mercy seasons justice."

~William Shakespeare, The Merchant of Venice (Portia in Act IV, Scene i)

ADDENDUM

s I am sitting down to edit some of these journal entries from seven months ago, I find myself reliving those experiences and feelings. Looking back with the hindsight of a 1st year resident I truly appreciate the opportunities we had to take an active role in the Pacific Partnership 08 mission, as it was an incredible formative experience. I think back with pride that our efforts touched the lives and health of so many individuals along the way. Revisiting this trip comes at a poignant time as well, as the USNS Mercy's sister ship - the USNS Comfort - is currently in Port Au Prince, Haiti making a huge impact in the humanitarian aid effort after the earthquakes hit. The ability to float a hospital to a recently devastated area has proven to be a true lifesaver of many and although I am certainly not in favor of many of our military exploits, this is one example of how our military might is invaluable to the human condition.

INTERVIEW:

BEYOND NETTER'S ATLAS

Vanessa Ruiz, founder of the websites Street Anatomy and Think Anatomy, discusses the interplay between anatomy, art, and the Internet.

BY OMEED SAGHAFI, MS IV

he human race has been intrigued by its own anatomy since ancient Egyptian times, however, the way anatomy is studied and viewed has since progressed: Hippocrates made empirical observations, Herophilos performed live dissections on prisoners, and Ibn Zuhr performed postmortem autopsies. It was during the Renaissance that anatomy crossed a bridge into the realm of art; artists including Michelangelo, Leonardo, and Rembrandt attended dissections, studied anatomy, and published anatomical drawings. In modern times, anatomy is not only a staple of medical education but is found sprinkled throughout pop culture. The advent of computers, the Internet, and smart phones has changed the way we study, view, and experience anatomy.

anessa Ruiz has become something of a leader within the modern anatomical zeitgeist. She started the website Street Anatomy while getting her masters degree in Biomedical Visualization at the University of Illinois – one of only five illustration graduate programs in North America. The website began as a blog to educate people about medical illustration but quickly grew into a five-author site that explores the widespread use of anatomy in everything from fine art to design. She is also the creator and author of Think Anatomy, a directory of online and mobile anatomy resources for students studying anatomy. Furthering the extent of anatomy in art even more, she is in the process of organizing a Street Anatomy gallery show to be held this September at the International Museum of Surgical Science in Chicago. When not connecting the world to the beauty of anatomy as an art form, she works as an art director for a pharmaceutical ad company in Chicago and does freelance medical illustration on the side.



What inspired you to become an illustrator? And of all things to illustrate, what inspired you to pursue a career in medical illustration?

> I actually started out wanting to be a marine biologist and went to the University of San Diego to study marine biology and eventually changed my degree to biology. In college I never took art or any illustration classes. I strictly stuck to art because that s what I wanted to do. My sophomore year, my advisor who knew that I would always doodle - asked me if I had ever considered combining science and art as a career. I had never heard of that. He asked me if I had ever considered who drew all the art in biology and anatomy textbooks. I had no idea that that was

an actual profession. I looked into it and discovered a whole world of illustrators who focused on medical illustration

So you had no formal training before college?

My mom always put me in a lot of art classes when I was little. I took one class in high school, but everything beyond that was self-taught.

What sort of medical/science training does one receive while getting a Master's in Biomedical Visualization?

> We had an intensive science education our first year, as well as illustration and art projects. We took anatomy with the medical students, we did the same cadaver lab; we took neuroscience, physiology, and immunology. It was pretty intense. We basically have to know what doctors know in terms of anatomy since they count on us to get it right.

What inspired you to start the Street Anatomy website?

I started it between the Fall and Spring semester of my first year of graduate school. Blogging was taking off at that time. I tried searching the Internet for any sort of medical illustration blog but I couldn't find anything. So I decided to start one on my own and chronicle my experience in graduate school.

How has the website evolved over time?

It started off as a way for me to teach other people about [medical illustration]. And then I started posting images that were less anatomically correct but more artistic and my audience started to react more to those types of images. It evolved into showcasing anatomy in art in general.

Do you feel that the website provides anything special to the public that they couldn't find elsewhere?

> So far I haven t really seen any similar blogs out there. I lecture every year at my old school on blogging and try to inspire medical illustrators to start their own blogs. A lot of the grad students have started blogs but they have remained similar to my original blog, telling the world "my perspective," and have not evolved into the broader sense of anatomy in the world.

To experience Street Anatomy or Think Anatomy for yourself visit http://streetanatomy.com and http://thinkanatomy.com.

What do you feel has been the overall public reaction to the website over time? To medical illustration over time?

> I never thought about anatomy as an art element or knew that people did this as a living. So I think people think of it as a cool thing to see their bodies as an art form and don t realize how much anatomy is actually used as art.

Your website has clearly demonstrated that there is a role for anatomy/medicine in art but is there any role for art in medicine?

> Anatomical art is used every day in textbooks. But I think the art is given a boring tone because its stuck in textbooks. I think people automatically shut their minds to the creativity of such an art form. Since its seen as educational, its harder to make anatomical art seem inspiring or creative. I would love to see anatomical art taken out of textbooks and used to teach outside of that medium.

What do you think is the future of the relationship between medical illustration and the Internet?

> It's exciting because there are so many new technologies that now provide the ability to take anatomy out of the textbook. Putting it on an iPhone, making interactive pieces, building the body in 3-D and being able to zoom into it and play around with it makes anatomy available to more people than in the old days when it was limited to people with access to cadavers.

Do you have a favorite post on the website?

The posts that I actually love and what Street Anatomy is sort of about is anatomy that is actually on the street: when street artists use anatomy. I love when a street artist puts up an anatomical heart on the side of a building. Anyone who s walking by and looks at it thinks, "Oh, that's what my heart actually looks like."

Do you have any recommendations for medical students or anyone in the health profession?

> There is something that a lot of viewers of the website have told me, including medical students and healthcare professionals, especially radiologists: they say when I look at the human body I am so awestruck by it." I just think that more doctors and medical students should appreciate the human body as a work of art rather than something that s just there to be fixed.

Last Patient BY GEORGE S. HELMS

In the waking world she sits in the filtered light of a dusty diner, Filling her small compact body with warm spaghettini.

From her serious little head to the sweet weight of her feet Resting against the worn floor,

She is rare earth, rara avis,

A miraculous place governed by no rules but

The faithful unceasing rhythm of her heart,
The cycling of her blood

From her flushed cheeks to her warm homely toes.

The fluid from her shoulder was already beginning to drain back to its right Place in the veins, those impudent ribs protecting the earthly thump of her heart.

And when she tilts her head up at me, half-laughing,

Every contour and shadow of her face is familiar and dear to me, Her, the wreckage of my hopes.



Vital Sign Room, SunMin Kim, MS III



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