Letter from the Editor

Before I came to medical school, I was filled to the brim with enthusiasm for the path that lay ahead. I believe a similar sentiment filled the hearts of most of my classmates. Embraced by the comforting thought that we had embarked on the journey that some of us had dreamed of for many years, we eagerly filed into the lecture hall, bounded off to our preceptor sites to meet our first patients, and buzzed with nervous anticipation of our first exams. A pure and unspoiled sense of purpose helped us in those early times: we are going to save lives, make the world a better place, and ease suffering.

All too soon though, the bright sky we imagined would guide us through our training began to show signs of darkening. It was becoming harder to keep our heads above the flood forming from the fire hose of information we faced every day. It was becoming harder to hold on to the warmth we had arrived with after witnessing the realities of our broken health care system first-hand, realizing that our generation of physicians would be left to pick up the pieces. It was becoming harder to see the light of humanity that had originally drawn us into this field as we came face-to-face with the limitations of our abilities to address every patient’s needs with equal enthusiasm.

Perhaps I was more naïve than some of my classmates, less prepared for the volatile shifts between light and dark that we face as healers. Still, I am willing to wager that my feelings are not very unique. Anyone who has had more than trivial contact with the medical world will know that it contains both deep joy and deep pain, hope and doubt, life and death.

The pieces I have been privileged to read and view as we prepared this issue of Lifelines served to remind me of how beautiful medicine can be, how beautiful healing can be, and even how beautiful death can be. For all of us, both those who give and receive care, we must find a way to see something beautiful in the dark shadows we will face. Within the pages of this journal, you will find pieces from medical students, physicians, patients, and caregivers who have found a way to do just that. I like to think of them as torchbearers, guiding me through the dark times I have faced and will face in the future. I invite you to do the same.

Best wishes,

Jess

Jessica Gem Linden Swienckowski
Editor-in-Chief
DMS II
# Table of Contents

## Poetry

1. *Autoimmune* / Ann Perbohner
2. *Longings* / Clare Goreau
3. *Why, Skull, are you always smiling?* / David Goldenberg
5. *Giraffe* / Jill Kaspar
6. *Reaching* / Jill Kaspar
7. *Corpus Callosum* / Julie Dunlop
8. *Electrical Storm* / Julie Dunlop
9. *Shattering Illusions, Part 5342.3* / Katie Semkiu
10. *Delivered* / Kristyn Brownson
11. *Science, To Death* / Kristyn Brownson
12. *On Mirror Pond (A Selection)* / Lys Weiss
13. *Three Short Poems Starting with In* / Lys Weiss
15. *Magic Show* / Sonia Sarkar
16. *Mom, where are you?* / Valerie Pinto
17. *All your life* / Valerie Graham
18. *Heart by Dark* / Valerie Graham

## Features

24. *Art and Medicine in Mae Sot* / Brian Guercio
25. *Recognizing Patterns by Touch* / Jane Prophet
Art

Shirley Pond / Meagan Kennedy
Norwich Wintertime / John H. Lyons
Twenty Twenty Surgery / Nicola Quatrano
Lifeline / Jeffrey K. Weiss
Fata Morgana / Melissa Vanover
Mom / Valerie Pinto
Layers 3 / Jeffrey A. Cohen
Twilight at Quechee Falls / Ceretha McKenzie
Birds / Jane Park
Water in Motion / Annie Michaelides

Non-Fiction

Peepers / Emily Bradley
A Real New England Yankee / Kyle Swingle
Trisomy 13 / David Ricker
An Unexpected Affair / Joyce Griffen
I want my caregiver to take good care of herself or himself / Kate Guernkink

Short Stories

A Cross Section of the Hirschfields / Aaron Sommers
What is Warfarin? / Charlene Kwon
Challenger / Patricia McGuinn
Acorns / Diane Kraynak

Cover

Happy in Guatemala / John H. Lyons
St. Maarten Springtime / John H. Lyons
Poetry
Autoimmune

In the flick of a switch
your body turns on itself
reacts with flame and fire.
Joints and organs swell
transforming everyday habits.
Stairs eating reading
walking breathing talking
elements of patience and fortitude.

What happens
when your body does not
know self from not self.
Are moods elevated?
Does rage increase
and sadness too?
And what about the heart
that pumps swooshing
life through its channels of your vessel.
When your heart enlarges
are you not blessed
to give and receive more love?

- Ann Perbohner
Longings

I want to lie in a babbling brook, in the cold, healing water,  
And watch a red-tailed hawk circle overhead.  
I want to watch a pod of dolphins in Tampa Bay with my children.  
I want to see the hummingbirds sipping from my bee balm.  
I want to float on a Lilo in a swimming pool.  
I want three sips of India Pale Ale, and a soft-boiled egg,  
And a puff pastry. I want to taste rich, three-day-old lamb stew —  
Fat infusion, with no wine.  
I want to walk onto the porch in the early hours of the day,  
And watch the sun rise over the hills and drink my coffee.  
I want to feel my lungs expand as I fill them.  
I want to identify wild flowers in the fields and woods  
And under the hawk’s nest.  
I want to be back on my snowshoes on two feet of snow.  
I want to drink my own unfiltered water.  
I want to sit on the porch with friends who have brought  
Scones and jam for tea.  
I want to feel useful — not just beloved.  
I want to deadhead my flowers and weed my garden  
And eat raw food with dirt on it — carrots, peas, tomatoes, radishes.  
I want to embrace my family completely.  
No masks, no consideration for their dirty clothes.  
I want my sister to succeed and live close to me.  
I want to visit England and stay close to my Family, there.  
I do not want to walk into a store.  
I do not want to shop.  
I do not want to walk into my work  
And be inundated by people who look sorry for me.  
I do want to see my grandchildren who are not yet conceived.  
I do want to take my grandchildren around my garden  
And read them stories about how the world was made.

- Clare Goreau
Why, Skull, are you always smiling?

Grim, gruesome grin across bony features
stripped clean of muscles, skin, and flesh.
Your jagged jaws curved and hypnotizing,
hollowed orbits mesmerizing.
What has Death taught you about Life?

Your irking smirking feels sarcastic to me.
Do you think now that you’re dead, you can see
secrets that make you wiser or better than me?
You are empty! Without brain or thoughts
to cause such a rude and mocking smile.
What has Passing taught you about Present?

Your flesh has rotted away.
You are dead, but not done.
Your bones left a message to stay
with us, the living:
That every day
could be our last
so, Smile.

- David Goldenberg
Séance

*Hello? You’ve got the wrong number!*

my grandmother said sincerely at ninety-four
before slamming me further from familiarity.
Quickly, I redialed and tried some reminders
of our forty shared years. Unsuccessful,
now I really wonder about the psychics’
claimed reunions between the living
and loved ones on the other side
when I can’t even make connections
just a few area codes away.

- James Washington, Jr.
Giraffe

I was there
The moment when knuckles paled
And voice and eyes disagreed.
I knew.
And you told me
“I’m ordering a 6-foot giraffe for the nursery.”
“Because.”
And the giraffe followed us all day
In and out of rooms
In and out of lives
It was waiting,
I wanted to ask you why it had to be so large
Or why your eyes were slightly red
— “High risk” and “Complications” were all you offered —
But it didn’t seem polite,
It wasn’t my giraffe.

- Jill Kaspar
Reaching

He reaches things
Opens jars
Fetches supplies from the cellar
Stairs your legs can’t handle anymore.
But he can’t tell you
If the cats are in or out
No matter how many many times you ask him.
Eyes lowered, voice raised
Your frustrated fingers wringing
Out of reach.
It’s been forty years since your hand touched
Any part of that man
Yet you’ve held on so long
To the kids
To the life you know
You don’t want your name on a list, you say.
There’s nowhere to go
Nothing to do
So you wait, hand outstretched,
For twenty-dollar bills
Pried grudgingly from a worn wallet.
The only thing he remembers:
How much (little) he has handed out.
As you try to knead out answers
From your lined forehead,
I drop an earring on the floor
And you forget yourself
As you reach out
To help me.

- Jill Kaspar
Corpus Callosum

A swaying bridge dusted with snow
bucking in the wind.
Gorge yawning beneath.

Magpies, ravens, and owls
crossing back and forth
in slow swoops
threading the sky
with their clean sweeps.

The space in between
humming inaudibly,
the quiet spin
of it trembling,
shaking the waters,
voices loosening
from the rocks.

Syllables rising up.
Stars of sound
pulsing.

- Julie Dunlop
Electrical Storm

Over the nerve endings
left raw and wild
as electrical wires
under an overcast sky,
the soft wrappings of prayer
spun in silent mouths
as far away as Tibet
and as nearby as next door
wrap and soothe, wrap and soothe

To dam the swiftly flowing
rivers of clear blood from the soul,
a firm press of light, the way
a star plugs a black hole,
a gaping wound in the lining
of the universe cauterized
with one deft patch.

- Julie Dunlop
We put away our bone charts and muscle diagrams and pictures of veins-arteries-nerves-whattheheckisthatagain and got ready for class on the clinical correlations of medicine (“there’s more to being a doctor than knowing the branches of the brachial plexus”)

this week’s topic: social inequities in medicine, they exist. (note the period. not an “and” or “but” or — followed by reflection)
the subtext of the schedule —
this week’s topic: shattering illusions, part 5342.3

amidst the frenetic up-coming exam energy
we listened to a “case study” called “This Is Someone’s Life. Right Now.”

a lovely 65 year old lady with cervical cancer
doesn’t qualify for medicaid — not poor enough
doesn’t qualify for medicare — didn’t work long enough
doesn’t qualify for insurance — pesky pre-existing conditions

With surgery, she can be cured.
{No more cancer!}
and return to being a healthy, lovely 65 year old lady

but that surgery is the equivalent to 5+ years of her salary

“What happens next?”

the question hangs in the air, which is silent and still silent, not because we are too tired to answer but rather because we know the grim course of what is to come:

“What happens next?”

What happens next? What does happen next? Who is advocating for her?
Who has enough energy at the end of the day after learning symptoms and landmarks and pathologies, after treating patients and rounding and diagnosing and running labs and taking histories and listening (endlessly) patiently, to fight the system to insist she receive care to shout that insurance profits in the 300% range are obscene.exploitive.unjust. to advocate for her life?

Back from thought bubbles of idealism our preceptors talk of Ms. Cervical Cancer and the millions of others like her in our country unable to afford medical care. They wax poetic about how they love working at the VA, where everyone receives treatment

Okay. But —

I’m pretty damn sure there isn’t a pediatrics department at the VA And our rotations are most certainly not all in that magical bubble And removing ourselves from the problem doesn’t even come close to solving it. Or make things better for those frantically trying to afford care

(though it may save us a small piece of heartache)

They talk of disease incidence rates and mortality and cost and preventative care and i think: how many people will I send home to die because no one could afford the care to keep them alive?

- Katie Semkiu
Delivered

Blue-black clouds steal across the horizon,
fecund bellies scoring the flat plane beneath.
Your news is obscured by escalating winds.
Barren earth, enlivened by the front —
Red dust pirouettes past a gaunt roadside cross,
past forgotten souls.
I practice my smile in the rearview mirror
in case.
Rain begins as I bear down on the pedal,
hoping to arrive for that final push.

- Kristyn Brownson
Science, To Death

I delivered your few, imperceptible cells.
Injection of steroids, suction, mechanical breaths —
immature lungs bellowed a perceived victory cry.

The nerve you have!
I scrutinized you under high power magnification,
dissected each deranged contour of your form,
stood vigil in a sterile vacuum while you embarked
down the wrong path again and again and again.
I published your profile to alert others of your ways.

Amidst a dark backdrop I detected you,
promptly defusing your radiolucent glimmer
with my poisonous cocktail.
Yet, at my zenith,
you stole throughout the fragile vessel,
erupting in victorious red from every orifice.

As a white hush draped across translucent skin
I watched the Soul escape and wondered,
was the departure because of or in spite of me?

- Kristyn Brownson
On Mirror Pond (A Selection)

I

In the still pond
The rock sits
Reflecting upon itself—
Secure in knowing
All things come
To that which waits.

II

Wind-blown ripples
on Mirror Pond:
Flash of wrinkles
on an aging face.

III

The pond lies dark
Beneath a filigree of plantwork—
An antique mirror
Stored in attic heat
Badly in need of resilvering.

IV

No mirror now—
Your surface slashed and scarred;
Bloody message, roughly scrawled:
Signed, Stormblow.
Signed, Treefall.

V

On the pond,
A thin skin of ice—
Frail barrier
Between water and wind.
O pond, my friend,
To get through the winter
You’ll need a thicker skin.
VI

To the signs of spring,
Add this:
On the pond,
Shrinking ice—
And the rock
Bemused
Rediscovers
Its reflection.

- Lys Weiss
Three Short Poems Starting with In

I
In this brilliant sky
The weight of a single cloud
Becomes unbearable.

II
Inside the snow,
A glimpse of blue fire —
There —
In the snow’s heart,
As in mine.

III
In the urgency of illness
The inner voice would no longer be denied:
A death-defying stunt,
This writing of words.

- Lys Weiss
The Mighty Cercan

Be I the hunter that feels the scalpel sting
Its venomous tip, steaming a fiery cauldron of
Liquid-ooze slithering on the vermilion sheath

See I inner being, prey
Unaware the pain — ah oh bearing

IT — extraterrestrial, uncontrolled, grows unaffected
Clones selectively attack

I trying to extrude the creature
Whispering incantations, solemnly

“Oh Mighty CerCAN,
Please don’t kill!!!”

- Rezwan Ahmed
Magic Show

Accidentally,
He has let his hazily-tinted thoughts
Lean against her blossoming memory
Streaking across the aching land
Ancient sand in a precarious glass bottle

She told him she was feeling fine
But as the fatigue swaddled her close
Her weary sighs stretched through the dark
A diminishing choral descent
Breaths like sharp points of light

Although he sang to her each night
It was a pirate taking on a piranha
Outnumbered by foreign invasions
He fails to pull one last rabbit from his hat
Resigned, magic medicine man

Instead he tastes defeat day in and out
And now he is like the trees
Rooted to the ground,
A satin statue in his grief.

- Sonia Sarkar
Mom, where are you?

Are you breathing
Are you breathing
I lean close
I watch
Did the sheet rise
Did your finger twitch
Ah... a sound
A breath

Are you in your new bedroom
Or your old room
Or any room at all
Do you know it’s morning

Can you hear
Me sing your favorite song
Que Sera Sera
How sad
How appropriate

A twinkle in your eye
I think I saw you smile
Do you know me
I think so
Wish you could say

Does baby food taste good
I think you like bananas
I’m your daughter
I’m your mother
I sit beside you
Watch, listen, care, love
And wonder
Where you are?

- Valerie Pinto
All your life

you kept your mouth folded
tight and your legs
crossed your forehead is

plowed into furrows and your
crows feet sag with the
seriousness of it all chewing

your pencil under the lamp and bundled
into your sweater you cross
words with concentration

while the moon glints
off tin roofs and fingers
your closed curtains

but the music

the music between your ears it reverberates
through the sleeping house crashes
off bookshelves and shakes

your buttons loose
take off your clothes woman
strip naked and dance

- Valerie Graham
Heart by Dark

Lilac scent powders the evening and softens
the night air in starlight, in white light, in eagle beak,
arrow stretch dipper light, peeper trill, frog cackle
Cassiopeia light, moonlight that quietly
creeps from the sill to the rug, climbs the feet,
scales the patchwork to wake
under the rumpled covers heart
pound drum
roll sound so strong in
kettle copper jive sweat-slide sync-
opate black
band bass.

Every second flashing red on weeping
willow walls reflects the sleeping rhythms
rumbling deep beside jump
start off(scared of the dark)beat
jolt through a marathon
skip clutch swallow
hard and sit up but
don’t stop don’t
stop don’t
don’t
stop your crazed
beat through the white dark, lilac scented,
peeper humming, never sleeping, last
forever full moon night.

- Valerie Graham
Features
Roger McCoy is the head of primary care for the Arizona Diamondbacks, the major league baseball team based in Phoenix, AZ. He received his Masters and MD degrees at Wright State University in Dayton, OH. He completed a family medicine residency at the Toledo Hospital in Toledo, OH, an urban center with four major hospitals and four family practice residencies. He also completed a sports medicine fellowship at Michigan State University and then came to Phoenix, Arizona in 1994 to work for the Arizona State University athletics program. Two years later, he began work for the Arizona Diamondbacks in addition to his responsibilities for the University. He also covers sporting events for two Phoenix area high schools and has a private practice in sports medicine based in Phoenix. He is a busy guy.

The following is directly transcribed from a phone conversation Dr. McCoy and I had about his career and how he came to be the head of primary care for a major league baseball team.

What has been the tenor of your career in Phoenix?

I came out here back in ’94 to be in a private practice and solely to be at ASU with my other primary care partner. I joined a group of four orthopedic surgeons and my other family practice partner. We are still with them, but not on paper – we split. I have my own private office, but I work with those docs for the Diamondbacks. We didn’t get the Diamondbacks until ’96 or ’97.

I am four days a week with my practice. One day per week I am all day at ASU. Usually I am driving down to the ballpark after work. Most of our games are night games during the season. It becomes long days. You are starting off at 7 in the morning, and if it is your night to cover a baseball game, you are not getting home until 11 at night. It is still enjoyable.

Same thing with ASU – sometimes you have football games on Saturday night. High school you have games on Friday nights depending on what time of year it is. You have to appreciate or enjoy sports with all the time you devote to game coverage.

There are two high schools in my community, where my office is located. One is Desert Vista and the other is Mountain Pointe. They have
turned out quite a few athletes. They are two of the larger schools in the state. We’ve been their doctors since they’ve opened. When I came here, Arizona was still growing. There have been 20 or more high schools that have opened in the last 20 years.

I have two PAs that work with me. One of them used to be one of my athletic trainers who worked with me at ASU before he went to PA school. I hired him right out of PA school and he has been helping me with the high schools.

Still, you will be gone quite a bit covering events, especially if you are going to do it the right way -- covering a training room once a week at the high school, covering the football game on Friday night, and sometimes even having what we call “bump and bruise clinic” on Saturday morning. We can get the athletes in quicker instead of waiting until Monday morning. We have X-ray available so it saves them the trouble of going to an urgent care that night. If it is not an emergency you can splint it; if they wake up more swollen you can get an X-ray. Instead of time you cherish to yourself on a Saturday morning, you are in the office for two or three hours helping your athletes out.

How did you come to sports medicine?

After I had sustained a major concussion playing hockey during college, my grades dropped for about a year and a half. Then they came back. My MCAT scores were decent but I didn’t get in to medical school my first try. One of my undergraduate professors from Miami University of Ohio was on the board for Wright State University. So I went and got my masters at Wright State under his tutelage and got into medical school without a problem after that. But then I didn’t know which way I was going to go. At the very end of medical school I fell in love with sports medicine.

When I looked around most of the universities were hiring primary care sports medicine specialists as their head team doctors because 90 percent or more of sports medicine is non-surgical. They were thinking why hire a surgeon as a head team doctor if he can’t do any of the primary care stuff.

I had other opportunities in my family residency as well. The University of Toledo team doctor was a graduate of the program, so by the end of my second year of residency I was already a team doctor for the University of Toledo. It made it easy to get the fellowship of my choice. A lot of work went in – a lot of Fridays and Saturdays and a lot of after-hours covering sporting events to finally get the fellowship I wanted.

What job opportunities did you have after your fellowship at Michigan State?

Out of sports medicine fellowship I had three job opportunities. One was with University of Florida. The other was in New Jersey for Rutgers
and Princeton. The guy who was out here at ASU had just gotten the job. He did his residency in Arizona and his sports fellowship at Michigan State. We had a tie that way. The Diamondbacks didn’t officially start until 1998. My one surgery partner got the job in late ’96 when we covered the minor league teams, building up to the Major League team.

What was the nature of the training in the fellowship at Michigan State?

A lot of it, luckily, I had done on my own. Actually, I had to learn a lot of it on my own. In the allopathic world as opposed to the osteopathic world, family practice and internal medicine just don’t teach on the musculoskeletal exam. I went to physical therapy places and hung out there. I was lucky to have both an MD and DO mentor at Toledo. The DO mentor was very high up in his side of things. Now he is the head team doctor at either Virginia Tech or University of Virginia. My MD mentor was a big Olympic doctor for a number of years and was taking care of USA figure skating. But I had to do a lot on my own.

So the fellowship was a lot of learning the musculoskeletal exam as well as you could learn it, hopefully equal to a surgeon as far as perfecting the exams and understanding injuries. Spending a lot of time covering events and being around different sports. A lot of what doctors do is based on history, and the same is true for sports medicine. So most of the time in my practice, once I hear the history I know what the injury is 80 percent of the time. The exam then confirms it.

A lot of what we do with overuse and overtraining injuries in sports medicine, you have to understand the sport a little bit. You don’t have to be an athlete to be a sports medicine doctor, but if you don’t understand the sport and how athletes train, it makes gathering the history more difficult. For instance, for a runner (I see a lot of runners and elite Ironman competitors), if I don’t ask if he is doing hill work, stairs, or speed work, these are specific questions for that sport that help you down the road to a diagnosis. If you don’t understand the sport, you don’t know to ask those key questions.

A lot of the fellowship is to get you a lot of MS exams in sheer number and spending a lot of time covering a variety of sporting events that you understand sports and the athletes.

Most of the sports medicine fellowships are one year. Some are two years if you want to go on the academic route and head up a fellowship or work as a faculty member. I don’t think you need to do that because I am already a faculty member at ASU!

Following up on your mention of training, is ‘mechanism of injury’ the right term to use with overuse injuries?

Is there a category, you mean? You are looking to contribute to the understanding of the mechanism of injury. A lot of people are jealous because I stand on the sidelines of ASU football games. I knew Jake Plumber
and Pat Tillman; all these big athletes were my boys. Everyone thinks it is so much fun being on the sidelines and watching football games. But most of the time I am beat by the end of the game because I am constantly watching each play, watching knees. I’m watching how guys are falling, how they get up, what happened when they were getting hit. A lot of times I can see the mechanism of injury, which again helps with the diagnosis. Things happen so fast the athlete usually doesn’t know what happened. Watching the play helps when you observe for a concussion, how a player acts on the bench after a big hit before they go back out.

With overuse injuries for an Ironman competitor or marathon runner, they are out where no one is watching them so you have to ask are you doing some hill work; for a rider it is one thing, for a runner it is another. Going up hill and downhill can lead into IT band syndrome and other injuries. That line of questioning can be categorized as trying to elicit the mechanism of injury.

What are some of your responsibilities to your baseball players?

For baseball since there are so many games it is a little different than other sports like football where there is only one game a week. We cover spring training here in AZ, all the physicals and lab work of major and minor league players.

When the minor league teams go off to different areas, we have assigned doctors in those areas to help us out to cover those; anything major they bring them back into town. When it comes to the daily season of the major league team, my partner and I are usually going down 90 percent of the time to every game. We see our team first obviously. He sees the sports stuff and I’ll see some sports stuff and the primary care stuff. We are also in charge of the umpires. Major League Baseball has a doctor that coordinates their care and we’ll give him a call. Actually that doctor is my head team physician with me at ASU and was my partner in my private practice. We also take care of the visiting team. If the visiting team needs something, I’ll run over and take a look; if someone has a bronchitis I’ll take care of it. If it is something major we’ll report it to their team doctors. If not, we’ll take care of it there, and their trainers will put it in their injury reports. Because there are so many games we usually have a handful of doctors in our own group that we split up the game with. We don’t stay every game the whole game; we have a handful of doctors we split that up with.

Can you speak about position-related training and preparation? Let’s talk about pitchers.

A lot of that is taken care of in pre-season or sometimes even the off-season. We prepare them. We videotape a lot of their upper back and shoulder motion, because that is where the support comes for a pitcher or a throwing athlete. Their training is usually a little different as far as what
they do in the weight room. We no longer lift weights like they used to because the old-time weight lifting never did anything to help you on the playing field. Most of the weight-training now is baseball and position specific.

One unique thing I did when I went to Michigan State: My one mentor at Toledo was a DO and I learned a little bit from him. I took some courses when I was at Michigan State because they also have a DO med school there and I became proficient with some osteopathic training. This is how I met Randy Johnson before he joined the Diamondbacks. Randy didn’t like to have his back cracked, he liked what is called “muscle energy”. It is a softer technique where the patient uses his strength against your resistance to manipulate the back into alignment. I met him off-season. I was with the ASU football team at the Sun Bowl and I got a page from Randy. One of the physical therapists knew me here locally because Randy had a home here before he joined the Diamondbacks. I met him on New Year’s Day to adjust his back and work on him. When he joined the team I would adjust his back before every game because he liked to be aligned before he pitched, and a lot of the time it helps. Obviously I couldn’t travel with him so I made sure my trainers learned the easy stuff I was doing. It wasn’t like magic, it was pretty easy to do. That was one thing we did with that pitcher.

Other pitchers need a huge amount of stretching and prep-work on the day they pitch, especially the starters. Typically they go through a five-day routine. Our strength coach, who is also an athletic trainer, has the position players on a daily to weekly routine making sure each body part gets involved, because, when it comes to baseball, it is not a race but a marathon. We try to impress on the players that it is an endurance thing, and they need to maintain their bodies throughout the season. Pitchers especially and a lot of the time the position players tend to lose weight throughout the year. They have barely two three days off in a month. We weigh them in every month to monitor that. You’d be amazed at how many baseball players end up losing five to ten pounds through the season because of the length and the repetitiveness and no rest. And so it becomes a unique balance trying to maintain strength and endurance without overdoing it because of the grind of the season.

This is how we take care of these athletes in pre-season and do maintenance throughout the season. A position player can take a day off here or there. Starting pitchers are on a five-day rotation. Bullpen pitchers are a little tough because you can’t afford to lose them for more than a day or two. That is why Major League baseball has the disabled list. You can bring some one up from Triple A while they heal. It becomes an interesting balance trying to maintain strength and treat minor injuries as they occur and prevent them before they occur as best as you can.

What are some of your goals for treatment in specific situations?

We had one pitcher who was out the entire year rehabbing from a sur-
gery. I didn’t have much to do with that at all; I just knew him very well. He was mostly in rehab. He had a surgery a year and a half ago and then rehabbed the entire season trying to get himself back, worked with our therapy people to build up his strength. Finally he was good enough to get him throwing again off the flat ground and off the mound. We even had him go see one of the top shoulder-elbow guys on the east coast, Dr. Andrews, and had him see the physical therapist there. What we finally found out was that his arm position was off by five degrees, and that was enough to be throwing him out of sync. He still didn’t make it back by the end of the year but he was pretty darn close. Now he is with another team. That is more the orthopedic side of things.

My side of it... it wasn’t last year but the year before. One of our top ball players came down with what we thought was a simple respiratory infection or URI during spring training. Prolonged cough, it persisted. He was becoming more fatigued and unable to play. It ended up being Valley Fever, or coccidiomycosis, which is in the dirt out here. He ended up having a couple of months (60 to 90 days) of recovery time while placed on Diflucan. He never quite got back to where he was by the end of the year. Unfortunately, the way baseball is, he was traded by the end of the year. He is healthy now with a different team. So these are one primary care and one orthopedic example of what goes on.

What is it like to deal with an injured player?

There are pressures coming from up top. There is the media always wondering when that athlete is going to come back. You have the management, the coaching staff, hounding you. “Is he ready yet?” “What’s going on?” “How close is he?” It sounds simple: this is what you have, let’s keep rehabbing. Now you add the media, the management staff, and the coaching staff, and all of a sudden now it becomes more pressure-filled when they come to you with return-to-play guidelines and timelines. That’s where it becomes a little tougher at the higher levels.

We get some of that obviously at ASU and at the high school level. You are constantly getting asked. It is interesting how when you go from one level to the next how important it becomes as far as timelines when an athlete is out for whatever reason and everyone wants to know when they are going to return.

Being a family physician, the ethic of such a physician is that you ask the more general questions of your patients. What is the tax on mental health of the player who has injury or illness that prevents competition?

Sure, it is very taxing on these athletes, even at the college level. A lot of times this is their dream. That is why they went to college. Obviously we want all our college athletes to get an education and graduate, but a lot of them are there to try and make it big and get into the professional level of their sport. At Arizona State for the last five years, we have had
a sports psychologist full-time to help. Whether or not he or she is specifically trained in sport varies. Each team usually has a psychologist or psychiatrist that is on board to help with players’ issues. Not only sports related but also family, drugs, tragedy. Most companies call it their “EPB”, employment professional benefits, for helping with issues that are detrimental to employment. Usually it is kept pretty silent. For instance, there are ways to contact these psychologists if there is something going on, and they can do it quietly.

With the sports side of this, most athletes take injury very seriously. The pitcher I mentioned earlier and a lot of athletes are very hesitant when they are coming back. They are afraid; they are nervous. They don’t want to blow the shoulder out again. They are very tentative as they get back on the mound, or they are tentative as they are running their 40- or 80-yard dash for the football team. Most of the time we talk about sports psychology, we want the athlete to come back doing everything subconsciously to the point there is not even a thought about the injury, they are only thinking about their sport. A lot of times it is hard to get there, especially early on. For an athlete at the professional level and it is his livelihood, an injury can be devastating. For a lot of them, they have made their money and have some benefits. Others, especially the football players, if they have not been in the league long enough, don’t get as much retirement. You have to deal with the agents – those guys can drive you nuts. They tend to tell the athlete what to do and what doctor to see. Even though you are the team doctor, the agent may say he wants the athlete to see a doctor on this side of town or this side of the country. This becomes another issue with injuries.

Even my guy who had Valley Fever it was frustrating for him. Every third day of playing he was exhausted. That finally started to go away, but they get it in their head, “Is this ever going to go away?” “Am I going to lose my livelihood?” We constantly reassure. We try to give them enough information so they understand what they are going through. We temper it with an understanding of how to deal with it and keep mentally focused.

We have a lot more resources than we did twenty years ago. Now most teams --if they don’t already have a psychologist hired by the team-- have pretty good access and good reputations for providing one. Now with major injuries people are assigned to a sports psychologist at least briefly to help them through the overall grind of going through rehab and the post-op phase if there was a surgery involved. A lot of these people have other jobs. One high school principal right now was a sports psychologist for the Seattle Seahawks. There are plenty of people who have dual jobs and aren’t fully hired by the team.

*What are your screening questions for mood or drugs, for instance? Routine visits with players must be similar to a family medicine visit.*

Most of the time we talk about things other than baseball. We listen
and watch. We utilize our training staff to give us hints about attitudes, changes in attitudes and behavior, those types of things. A lot of times your training staff can be a valuable resource in spotting someone who may be going into a depression or acting differently due to alcohol or drug dependency. We also throw in a long questionnaire about both their orthopedic and non-orthopedic health. We have several questions intertwined in there that can give us hints as to mood or behavioral changes, so we can start asking more questions, but nothing in depth to make it too obvious.

For the minor leaguers, for many years now, we do an annual drug screen, and now as you probably know, Major League Baseball has a urine drug screen policy, with testing three or four times a year at any time. We haven’t had problems lately with drug screening, though we still have questionnaires and we pay attention to when the trainers bring up changes in players over a period of time that could be related.

Are your athletes forthcoming with their mental health concerns?

Not differently than the average patient. As many of my patients in my private practice, every day, a lot of times getting to know them a little bit after a few visits and listening to things. If something just doesn’t add up right, they are complaining about this, complaining about that, you get a sense that these aren’t matching what I am finding on physical exam. You starting asking, “is there something else going on? Are you getting sleep? Are you working out like you used to? It looks like you put on five pounds. It looks like you are dead tired.” Then they come out and say, “I just lost my job… There was a death in the family… My wife and I are having trouble.” Knowing the patient or athlete allows you to see something new because they are coming in with so many complaints that don’t make sense, body aches, tightness that doesn’t fit with any injury.

Sticking to your family practice roots, being a whole doctor, listening and getting to know your patients... Unfortunately, when you have a couple hundred or more minor league players, and 40 to 60 major league players, you can’t get to know them quite so well. So the sports medicine side of things you rely on your trainers to give you feedback. That works pretty well. You’d be amazed how many times at ASU one of my athletic trainers would come up to me about a gymnast who was tearful all the time, losing weight or a softball player who was late to practice when she wasn’t before, or looking down. We do have a system that can catch these things.

Are there any medical fads among the Diamondback players? Platelets?

Platelets aren’t a fad as much as they are a technique to treat a chronic tendon injury or muscle injury. There is some research on it, but not a lot yet. Some team physicians in NFL and major league baseball have been
using it on their private patients but not necessarily their professional athletes. If they feel comfortable with it and the situation is right, they use it on their professional athletes.

Some athletes were doing Viagra to get the flush to their muscles. That faded after a few guys realized that there were unwanted side effects getting blood flow everywhere. Body builders and weight-lifters still use it. Fads go in cycles. Now athletes are careful because of drug testing. For instance, only special batches of highly purified EAS supplements go out to professional athletes. It’s not the same stuff you and I buy at the store. People will have positive drug tests from cheaply made supplements.

_Do you warn your players that they have to be careful with what they take?

Early on when they started drug testing, I told one of our more famous players that he couldn’t take the line of supplements and vitamins he was promoting. You are okay to promote, I said, but you can’t take it. Anything in there could have turned one of his drug tests positive. There was no purity check with this particular line of supplements.

_Do you have a particular love for the game of baseball? I would be a baseball doc and go for the New York Mets.

It is hard to do that because job openings don’t always open up that easily. It is funny; baseball wasn’t my favorite sport. I played hockey. I would have liked to be the Phoenix Coyotes doc or something like that. I like football, too. But baseball wasn’t the highest on my list. As a matter of fact, my love of baseball came after being a team physician for the Diamondbacks, getting back into the game. I hadn’t played baseball for a while. I hadn’t been a huge fan through medical school or my training because you didn’t have much time to be much of a fan of anything. Once I got the job here, I became more of a baseball fan because I learned the true ins and outs and got to hang with the guys more. I did a lot of traveling with the team on my own to see stadiums. It was a lot of fun. I became a baseball lover after the fact, but I loved all sports. My dream truly was to be a team doctor for a university. That was my true love because when you are at a university you get the flavor of all the sports. You get a wide variety and I like that. That is why I still work at ASU.

_And young athletes are inspiring.

Yeah, they are. The same is true with high school. That is why I do it, and it is a lot of fun. Those guys are doing it mostly for their school. So do the college guys. Most of the college athletes don’t become professional obviously because there aren’t professional levels for every sport. It’s fun to see a nice variety. That is why some people go into primary care because you are not stuck doing one thing. This type of training has contrib-
uted to my success. At least 95 percent of sports medicine is non-surgical. There is a wide variety of things you deal with. Heck, I remember seeing one of my softball girls for a weird headache. I followed the headache protocols, she fell out of the norm and I said you just bought yourself an MRI and sure enough she had a pituitary adenoma. You get all sorts of things you need to be aware of. You need to be a good family physician to be a good sports medicine doc.

You have to hone your musculoskeletal exam skills. Get extra training at physical therapy places. I did all the extra training to learn osteopathic techniques, which helped my exam skills. This in turn helped me meet people like Randy Johnson before he joined the Diamondbacks. A local physical therapist who worked with Johnson in Phoenix knew I did this training. That is how you open doorways and broaden your horizons instead of sticking to one skill set of training.

Tell me more about concussion in sport.

I am a concussion person. I worked on concussions during my fellowship. My mentor worked with the guys who formed ImPACT, a neuropsychiatric testing to evaluate concussions. MLB, NFL, NHL all use the test. It was piloted at ASU among other universities. I had the big concussion and a few more since I have played hockey, and I was curious about it. One thing we have done here because concussions are so common, we have men's rugby and men's ice hockey as club sports only, for which we have hired another physician who just takes care of the club sports. We are now pre-testing club sports with ImPACT. It helps to have it pre-tested and when you get concussed, you re-take the test so the doctor can use it along with other findings as a guide to return the athlete more safely to the sport.

Do all college sports use a baseline neuropsychiatric test for their athletes?

They should. ImPACT has spread around PAC-10 and Big-Ten. Most places do have a neuropsych test. If they do have it for their teams, they don't always have it for their club sports like rugby or hockey. There is more concern about this as you have probably heard. A lot of people probably get concussed and don't even know it, and it can get overlooked. At ASU, a young woman on the rugby team came in for something unrelated to concussion but mentioned in passing that she was light headed and passed out six times. To make a very long story short, over a year period she had six concussions. She was teary-eyed, her grades had dropped, very emotional. She was crying at a moment's notice. I said, "Young lady, you have the typical post-concussion syndrome. This will heal if you quit playing rugby and let your brain heal. You'll get over it."
Are these depressive symptoms you are describing?

Yes, depressive symptoms, emotional lability, depending on the type of concussion and what part of the brain has been affected. It was pretty evident because I knew enough to catch it but to her she just thought she was getting dings here and there. That was the nature of the sport: get hit and keep playing. A lot of her impacts were head to ground. These chronic injuries can slip by if you don’t watch out.

Can you give a specific example of concussion on the football sidelines?

Guy took a hit, one of our running backs. He walked off fine, grabbed some water and sat down. He then started listening to the coach about the play. You could look in his eyes and see that he was dazed. He was squinting and rubbing his eyes. I grabbed him quickly and took him aside and started asking him some of the standard questions: who are we playing, what is the score, how much time left in the half? Then I ask the tough question about the play he just ran and his responsibility on the play. He couldn’t answer, so I grabbed his helmet and let the coaches know he was out until we reevaluate him. Here is someone who looked normal coming off the field and if you hadn’t kept an eye on him he would have put his helmet on and went right back out.

How long until he could go back in?

It can be 15 to 20 minutes. He had enough symptoms right there that he was done for the day. Even if he had recovered I wouldn’t put him back in. This is newer practice. Twenty years ago if his symptoms cleared, I may have considered putting him back in. What we know now about concussions, we don’t do that.

Another example was at the high school level. One of our kids got popped, and he was fine. I was talking to him. But it can take 15 to 20 minutes for the first symptoms to show up after someone has been concussed. The athlete can continue to play after a concussion and still do everything right. I kept an eye on him and asked him three times about the play he ran. He answered fine the first two times, but the third time I drilled him he couldn’t answer. He was finally showing the concussion symptoms. That’s when I pulled him. The guidelines are still not definite even though the knowledge keeps improving, but you have to be cautious for the subtle cases.

What are the symptoms a few hours after the concussion?

Symptoms many hours later vary. There can be headaches, dizziness, emotional lability, or vigorous nausea and vomiting. The high school guy had a light headache and I had the parents wake him up a couple of
times. The ASU guy had a horrible headache and vomited once. As a precaution, we sent him for a CT just to be sure. When you are dealing with nervous parents, you wind up sending the athlete for a scan a lot of the time. Rarely is there something wrong, especially if you do a good exam and tell the parents how to follow him.

You mentioned you played hockey.

Still do, twice a week. There are men’s leagues out here. I played one year at Miami of Ohio. I suffered a concussion, but the reason I didn’t play was the pre-med lab schedule. I played for the intramural team and the fraternity house after that. My parents made me a good all around athlete. I played football, baseball and basketball up to high school. In high school I played golf, hockey and tennis. It has helped me become a better sports doctor because I understand the sports. At ASU if you are looking at a golfer or tennis player or baseball or softball or basketball player, at least if you have played it a little bit, it helps you understand the sports better.

Do you have thoughts for medical students who want to do sports medicine?

I do a lot around here for medical students and residents looking to get into sports medicine. I tell them what they need to do to make their resume look better to a fellowship. To sit for the CAQ (certificate of added qualification, essentially the board for sports medicine) you first need to have fellowship training. When I took the test, it was way too easy. They were grandfathering in doctors who were doing sports medicine who never had a fellowship. Now you cannot even sit for the test without a fellowship. So students need to know how to choose a program. And today, you first need to pick what family medicine program to do. A lot of the programs don’t care about sports medicine and don’t give you much free time to cover events. Now such experience is the expectation and not the exception.

You have to do one or two sports related rotations during residency to get into a fellowship. It also doesn’t hurt to do a rotation at an institution where you would like to do a fellowship. I did a rotation at Michigan State in my third year of residency. Thank God I switched to an earlier rotation because it gave me a chance to meet the fellowship people before they made decisions on that year’s choice.

And here I am.
Art and medicine are distinct enterprises that I have struggled to combine. Actually, that is not entirely true. They are distinct, but I have not tried very hard to fit them together. Every notion about combining the two that occurred to me seemed contrived, so for four years, I just carried each one independently until I went to Thailand.

I split my fourth year in order to go to the Mae Tao Clinic in Mae Sot, Thailand, on the Thai-Burma border. The clinic was founded by a Burmese medical student in order to assist people fleeing across the border in the wake of Burmese military crack-downs on the pro-democracy movement of late 1980’s and early 1990’s. The clinic is staffed by Burmese refugees, and the patients are refugees and migrant workers from Burma. Unfortunately, fighting between the Burmese military junta and various resistance groups continues to this day, and the clinic has expanded greatly to assist people who have “illegally” crossed into Thailand to avoid political and economic oppression. The Thai government does not formally recognize that fighting continues, so the refugee camps are essentially closed to additional people.

Much of the staff lacks official identification documents due to the circumstances of their departure from Burma and entry into Thailand. Consequently, they live at the clinic, ineligible for work in Thailand. Among them are some medical and dental students and physicians from Burma. However, most staff members do not have prior medical experience. They are trained in-house using book of medical guidelines co-authored by various NGOs. Visiting physicians offer further training to the medical staff. Medics whose only training is having scrubbed-in with some of these visiting doctors perform minor surgeries using local anesthetic. On the medical wards, complete blood counts and urinalysis are the only diagnostic tests available. Chest X-rays are performed at the local Thai hospital and cash must be paid up front, so only a few patients are referred there for imaging. Physical diagnosis and tincture of time are relied upon almost exclusively.

Virtually everyone at the clinic is a survivor of violence. The resultant mental health burden is staggering. Even so, counseling services at the clinic are under-utilized for a variety of reasons: speaking of painful experiences can give listeners power over the speaker, privacy is guarded due to the presence of spies and informers in Burma, and mental health as a concept has not been accepted fully.

It was in this environment that I thought art could offer something special to medicine. I created a series of art workshops for patients and staff...
at the clinic. The concept was to teach participants to create art in a way that the act of creation, not the final product, becomes an expression of painful emotions and experiences that cannot be spoken about. The resulting approach to making art is akin to mixing Abstract Expressionism with Buddhist Calligraphy and 6th grade art class. To people with prior experience in the arts, this comes across as a strange idea. Thankfully, none of the participants had any art experience.

It turned out to be a great success. Several times people arrived to the workshops too ill or upset to even draw, but left with beautiful and important pictures that they had drawn themselves. At the end of my time at the clinic, I collected all of the pictures done in the workshops and I put on an art show and party for everyone at the clinic. What follows are pictures and commentary of some of my experiences.

1. This picture was taken outside a refugee camp near Mae Sot. This cow is outside the fence and, therefore, it has more freedom than the people on the other side. Although the camps offer safety, refugees are not able to work in Thailand or to leave the camps legally. Entry by outsiders is strictly regulated, unless you are accompanied by someone affiliated with the camp or go on Sunday and pretend to be a missionary. Camps provide vocational training, educational classes, and basic medical services. Typically, there are one or two local doctors who travel to the camps to see patients a few times per week. Occasionally, medical missions come to provide medical services, such as cataract surgery. The Thai government provides the land and some aid in the form of food, but refugees are responsible for constructing their own homes. The camps are a warren of bamboo houses and muddy streets. While visiting one of the camps, my companion remarked that he imagined that it was something like a medieval village.

2. One of the larger ethnic groups in this region are the Karen. There are Karen people in both Burma and Thailand. I traveled with some other clinic volunteers to a Thai Karen village in the mountains outside Mae Sot. The village is six hours from the road by elephant. It is another four hours by truck to the city. The man pictured here was one of the village elders. He has lived there for his entire life. He was a boy during World War II and even though there was significant fighting less than one hundred miles away, his only knowledge that the war even existed was due to a military plane that flew over his village once. He learned about the details of the war years later. His thighs are covered with tattoos given by a Buddhist monk to impart virility. Each thigh took one day to complete. He said he had to smoke opium to endure the pain. He owns three elephants, so he is a wealthy man by the standards of the village. However, elephants are not as important as they once were as most farmers are using small tractors known as “Japanese Buffalo.” If you are in the market for a used elephant, he recommends that you look for one with a large head and large ears, and five toe-nails on the front feet. These are signs of an elephant from good stock.
3. This woman said that she had never drawn before. She made a wonderful picture depicting her family. When I asked people to draw their families, I was surprised that they drew their immediate relatives. Families in Burma are multi-generational with many brothers and sisters. I never learned if people only drew their immediate relatives because it was too much work to draw everyone or if they are considered to be most important within the larger group.

4. Women and children commonly spread a golden mixture of herbs on their skin. It offers some protection from the sun, but also is considered to be very stylish. Some create intricate designs on their skin, others just cake it on. In either case, the effect is quite arresting.

5. No one at the clinic had ever experienced an art show before and did not quite know what to make of it. I supplied food and drinks and hired a band. The band was held up at a police check-point for a few hours, but people amused themselves with karaoke in the meantime. Karaoke is a beloved pastime. Many people in this part of the world have learned English from 1970's rock and country and western songs, which are all that seems to be available for karaoke in Thailand. There were about two hundred people who attended the art show. When possible, families travel together to the clinic and stay for weeks while patients mend. Families are responsible for feeding the patients and for performing nursing duties. Therefore, the clinic has the feel of a village and there are vendors who sell virtually everything one could need, from food to clothes to chamber pots. Even so, there is no organized entertainment at night. I wanted to put on the art show in order to show my appreciation for my time there by providing an experience that could include everyone. Also, I felt a heavy atmosphere present at the clinic and I wanted to create a night of levity before I left.

6. The folks at the clinic had never seen an art show before, and some were hesitant to even come into the room at first. With some gentle cajoling and the offer of food and drinks, soon enough everyone was inside having a fun time.

7. The people at the show were unencumbered by the expectation of formality typically found in art galleries in the States. People danced to the band and sang karaoke. Children wrestled on the floor. Parents sat underneath the pictures resting their backs against the walls. Dogs wandered in and out. Vendors stayed open late and pulled their carts into the courtyard, illuminating it with their candles and gas lamps. In addition to the art work hanging on the walls, I had set out a few binders of drawings and several tall stacks of loose drawings. People pawed through these and passed them around excitedly. Everyone was talking loudly and enjoying the pictures. It was unlike any art show I have ever been to, and set a standard by which I will measure all others.
Art
LifeLines

Twenty Twenty Surgery

Nicola Quatrano
Lifeline  Woven tapestry, 4 inches by 7 inches, sett 13 epi, cotton warp and weft  Jeffrey K. Weiss
Fata Morgana

Melissa Vanover
Twilight at Quechee Falls

Ceretha McKenzie
Features, continued
Heart sculpture. A 3D print, sometimes called a “rapid prototype”, made from Magnetic Resonance Image data in polymer, then silver-plated.
Recognizing Patterns by Touch

Jane Prophet

The Heart, silver

Jane Prophet
To make my art pieces I often work collaboratively with experts from other disciplines. In 2004 I was artist-in-residence at the Heart Transplant Unit at Papworth Everard Hospital near Cambridge, UK. I was there to collaborate with Francis Wells, a cardio-thoracic surgeon who has developed a new way of repairing mitral valves. This is my account of that extraordinary experience.

How is it that I arrived at such a willingness to work outside my field? I have a long term interest in the sciences, inspired by my metallurgist grandfather, and a strong belief that there is much we can learn from those working in disciplines other than our own, much to be gained from hearing such people speak about their work or by reading their papers. Observing one another at work, and being immersed in the strangeness of a collaborator’s everyday environment can be of equal, or more, value. Language can sometimes be a barrier to understanding – specialized terms and shorthand can obscure meaning and unpacking them for the newbie often interrupts the flow of conversation and ideas. Still, it must be done for interdisciplinary collaboration to work. But there are other ways we can transmit ideas. Verbal communication can be seamlessly and silently augmented, or superseded, by diagrams, by touch and other forms of non-verbal communication. New insights and ideas can form as patterns that we initially struggle to relate to (such as the 3D form of a heart valve), become recognized as being similar to another pattern that we know well from our own everyday environment.

What I hope to show by discussing my work with, and by my observations of, Francis Wells (Frank), is that when we invite others to witness our working process and allow them question us, we often learn new things about our own field. By responding to someone who comes to it fresh, with no assumptions about ‘the best way’ of doing things we can expand practice and gain an appreciation of other disciplines. Occasionally we gain insights that can revolutionize our work.

During my residency I spent time with Frank at Papworth hospital, immersing myself in his everyday lived experience, observing him at work, going with him to the canteen, on some of his rounds, scrubbing up and accompanying him to the operating theater. Throughout this we chatted, I asked many questions, answered his questions and discussed my observations with him. I was the surgeon’s pet, following along at his heels, sitting quietly when told to, but unlike Fido I got to talk back! This sort of ‘immersion’ has become my preferred way of starting to work with experts from other disciplines, because I am convinced that, for all of us, knowledge is ‘situated’. A surgeon’s knowledge is situated in, and connected to, their everyday tools, materials, routines and behaviors. This idea places importance not just on the surgical environment but the social spaces and more mundane aspects of their working lives.

Most days I met Frank in his office. Like many UK National Health Service facilities, these were slightly tatty and basic in form. It is important not to judge a book by its cover, Frank, arguably one of the top mitral valve repair surgeons in the world, has worked out of a Portacabin for
years. But it’s hugely welcoming, with a sofa, stacks of books on art as well as surgery and lots of art on the walls plus photographs, drawings and cards from patients. I accompanied Frank to the operating theatre, watched him perform and teach surgery, and witnessed the way he communicated with patients and other medical staff. I was interested in his use of drawing and touch to explain complex procedures to both lay people and fellow professionals. Frank is always drawing, it’s a great way to overcome language barriers and to recap a recently completed procedure, it helps patients to understand a forthcoming operation and trainees to focus on the importance details like the shape of an incision.

I noticed that for Frank, training other surgeons in keyhole surgery techniques is as much about laying his hands over theirs (as they use keyhole surgery equipment such as staplers) to assist them in deciphering subtle changes in resistance, as it is about teaching them to watch the remote camera displays fixed above the patient showing the interior of the patient’s body.

After talking about this, we were in an operating theatre when Frank asked me how tight I thought the human heart should be held (the surgeon typically manually squeezes excess air from the heart cavities towards the end of open heart surgery). At first I felt that I had few skills or experiences that I could draw upon to answer. I wanted to say, “I have no idea”. But one does not ignore a question from a top-notch, busy surgeon, especially when it is asked in the middle of open-heart surgery. I took a deep breath and described the first thing that came into my head (though in fact my initial response to his question was not a ‘thought in my head’ but a ‘feeling in my hands’). I recounted how, when I was about seven years old, my mother bought me a hamster and taught me how to hold him. She warned me that, if I held him too loosely, he could fall and be badly injured. I clutched him tighter – she told me a tight grip could injure his delicate bones and organs. The perfect grip was learnt by gently testing my grip, watching the hamster’s eyes. If they started to bug-out, I relaxed my grip, if he moved through my hands, I increased my grip to find a happy medium.

Frank told me that he thought this was not a bad guess, similar enough to his grip on the human heart as he de-aired it. I felt less foolish. Importantly, I realized that there were relevant patterns I could draw upon from my own life when talking to him, that many of them were about touch and grip, an understanding of materials’ qualities through their feel in my hands. Most artists have a deep understanding of materials though touch and can extrapolate from familiar to unfamiliar materials and objects, and are used to coming up with creative solutions for substituting one object or material for another, and for disassembling and reassembling mixed media objects.

Surgeons like Frank are highly attuned to touch, especially when they are performing ‘in theater’. Equally important are monitors that display data read-outs. Towards the end of a mitral valve repair, the repaired valve is tested before the patient’s wounds are closed up. The surgical team
gather near a monitor and watch as the heart pumps, looking closely at the action and movement of the repaired valve, such as the way the blood flows and how efficiently it forces the valve shut. The heart and its interior are represented moving in real-time. In much medical illustration (both 2D and 3D) the heart has a simplified quality, in particular the detail of the vascular structure is often absent. By contrast, Magnetic Resonance Imaging (MRI) scans of the heart show the organ in detail, revealing complex branches of veins and arteries. In open-heart surgery the look and feel of the heart is different again. As soon as the chest cavity is opened and the heart revealed, it has necessarily been distanced from the tissue that helps to hold it in shape. The blood that fills the vessels and gives them their distinctive structure is re-routed via a machine to oxygenate the blood while the patient’s heart is operated on, and those vessels become flaccid. When lifted, the heart and its vessels are subject to gravity and, despite its muscle mass, the heart’s 3D form is very different from that of MRIs of the same heart seen pre-operatively.

Having noticed this, I took MRI data and made a sculptural form directly from that data using a kind of 3D printer. The resulting object had much of the detail of the vascular structure and was true to the form of a heart held inside the body. As a standalone object, it was of interest to the surgical team at Papworth, who discussed its surface texture and structure in detail as they handled it. This object was my response to the importance of touch and real objects to the surgical teams’, and to lay person’s understanding of the structure of the human heart.

Frank’s everyday creativity is expressed in many forms besides the most obvious - his surgical skills in response to particular anatomies and surgeries. One of the most familiar to a visual artist like myself, is the way he draws while explaining disease and surgical remedy to patients and other surgeons. He draws with whatever is closest to hand, often on cafeteria napkins and on the backs of envelopes. This ordinary drawing process became extraordinary to me when he drew in the operating theatre, with blood on surgical paper. To his surgical teams and his peers, Frank’s blood, or ‘swab’, drawings are extraordinary not for their aesthetic quality, nor for the materials he uses, but for the novel surgical techniques they describe. These techniques are Frank’s significant developments in mitral valve repair. The operating theatre is a context in which blood and surgical paper are everyday materials, close to hand; where surgical swabs are sterile while a pen would not be. But what is everyday to a surgical team, the matter found in the operating theater, is what makes the drawings strange, shocking even, to the rest of us.

If context is important to the way we define, and make meanings of art and images then we cannot ignore it in this case. The swab drawings never appear outside the operating theatre, they are not intended as art works nor seen, until recently by anyone other than the surgical teams, they are thrown away with surgical waste. They function as diagrams, used as an evocative supplement to the surgical process. ‘Evocative’ because, as Frank draws, dipping his surgical swab into blood in the open
chest cavity like an artist dips a pen into ink, he is verbally recounting the procedure he has just completed, and that his drawing refers to. He uses the act of drawing to focus attention, explaining his decision to cut in a specific way, pointing out structural idiosyncracies encountered when operating on that particular human heart, and how he responded.

The audience context is also important: surgeons visit Frank to watch his new mitral valve repair technique and he trains junior cardio thoracic surgeons. International visitors often have English as a second or third language. The patient’s needs are central and the operation will not be slowed so that Frank can explain something in more detail as he goes along. The post-operative drawing evokes the procedure after it is largely finished, acting as a visual prompt, often supplanting verbal language as a tool for communication.

Francis Wells’ new technique for mitral valve repair had already been performed on over a hundred patients when I first publicly showed videos of his ‘swab drawings’. While his drawing process can inspire other surgeons observing his new mitral valve repair, the repair technique itself was inspired when Frank was outside the hospital engaged in another passion – the art of Leonardo da Vinci. Looking at a series of heart and valve drawings by Leonardo da Vinci, circa 1510, Frank was inspired to rethink the way he made cuts during mitral valve repair, “[w]hat Leonardo was saying about the shape of the valve is important. It means that we can repair this valve in a better way.”

Sometimes collaborations result in large-scale artworks that embody our different disciplines. My work (Trans)Plant is a 15ft aluminum sculpture that opens and closes, a giant mechanical plant structure that clearly brings together mechanical engineering and the study of natural structures in the form of an object easily identifiable as a sculpture. By contrast the works I made with Frank are subtle interventions. The ‘swab drawings’ only become art when they leave the operating theater and are shown in a gallery, out of their original context. Similarly, the silver Heart object moves from anatomical teaching object to artwork by the virtue of its silver covering and placement in a gallery. Once there, both works seem to be inextricably linked to the history of art: blood behaves so like ink that we become lost in the painterly qualities of Frank’s drawings; the silver Heart calls to mind ornate vessels or the containers for religious relics.
Non-Fiction
“Shhh, listen,” you whisper as you roll down the station wagon window, letting in the air on which the peepers dance. The chirps come one after another, building to a crescendo that drowns out the cars passing on the road behind us.

“Listen Emmy,” you say as you raise your finger to your ear. We are two miles from our house in New Hampshire. It is dusk.

You stop the Subaru on the side of the road next to the swamp, like you did each year before you died. You rest your head against the gray weave of the driver’s headrest, the fine wisps of your hair caught in the cross-breeze between my window and yours. Your eyelids close slowly as you breathe in May. Your chest inflates and slowly lets go again.

“I hear them, Mom.” I position my head against the passenger’s headrest so that we are the same in different places. “They’re loud tonight.”

“Maybe they have something to say.”

This scene did not happen, of course. It has been four years since the cancer in your breast made you leave the peepers and all of the other singing amphibians behind on earth. I am sitting alone in my car, blue not maroon like your old Subaru, imagining what you would say if you were alive. This is a game I play when I miss you most—reconstructing experiences we shared and making them present. The only thing I know for certain tonight is that you would ask me if I could hear the peepers, but the rest comes as readily as if the scene were a memory.

“I wonder when they sleep?” You would ask after a spell of breathing and breathing and breathing. Your purple cardigan—the one that is soft like the inside of your arms—covers the chest port that feeds life into you on Wednesdays.

“During the day, don’t you think?” I say.

“I don’t know – maybe.” You refer to the lull in the early morning when the small frogs’ songs dull and fade. You know this because you always wake at four in the morning to move from the couch to your bed. Or maybe you know this because as you get sicker you stay on the couch and then the hospital bed, both of which are next to the sliding glass door through which the peepers speak to you. Regardless, you know this because the line between night and day knows you.

“I wonder if they cuddle,” you would say.

We both laugh and think about all the nights we wove our toes to-
gether under your white cotton, waffle-weaved blankets.

You put the car in drive, idling along the side of the road. Your body is still shifted in the direction of the sounds while your right hand guides the underside of the steering wheel. I worry that a car might come around the corner, but I know if I tell you to move to the shoulder you will say, “relax.” So we edge further along the road, as though the speed at which we travel makes us invisible to the peepers; maybe they will call to each other even louder because they think they are alone.

“How small do you think a peeper baby is?” you ask as your cheeks bunch together.

“Tiny. Teeny, teeny tiny. If a peeper is the size of my thumb, I bet the babies are the size of my fingernail.” I make a cradling motion with the curl in my pinky. We amuse ourselves with make-believe, imagining the baby peepers are playing bumper cars by dipping their webbed feet into the water, propelling their lily pads toward other pads. We envision the Thumbellina-sized frogs calling into the night and lighting up like a young child when the sounds come back to them. All night they play this game: “Hello out there. Hello out there.” All night we play this game: “Here we are. Here we are.”

“Where do you think they sleep?” I ask.

“On the lily pads.”

“Like a bassinet?”

“Yeah. But without the sides.”

“But what if they fell off?”

“H-e-l-l-o, Em. They’re frogs. They can swim.”

“But they’re baby frogs. Maybe they have trouble.”

You say that when the sun starts to come up, woodland fairies carry them to a bed of grass where they sleep until the moon wakes them again. Your voice goes up and down like a bobbin as you spin the story.

“The same fairies that used to clean our house when we were on vaca-

tion?” I joke.

You look over your shoulder, your head tilted slightly left while you rub a curl between your thumb and middle finger. “When you have a baby some day, I’ll paint the nursery with peepers.” Your words make whorls of warm breath in the blackness.

“Jeff didn’t even know that a peeper was a frog. Can you believe that?”

“Yeah, but he knows a lot of other things, Emmy.”

“True. But who doesn’t know what a peeper is?”

We talk about babies. You make soft cooing noises, as though the young peeper’s night calls transports you to the wicker rocking chair in which you rocked me as an infant. “They would be just like sugar cookies,” you say.

“What would?”

“Your babies. If you and Jeff had babies they would be like sugar cookies—all tan skinned and blonde.”

You tell me about how much I cried when I was little, about how bottles of warm milk and long car rides were the only reason I slept at
all. When I joke that Jeff’s and my babies wouldn’t be as small as peeper babies, you say, “I wouldn’t care if your babies were the size of whales.”

You adjust the air vent to point away from your chest and you laugh about how it was a miracle I have so much hair, because it didn’t grow in until I was three. You tell me how you used to dress me in pink just so people at the grocery store would know I was a girl, but I had a knack for dirtying them before we got to the car.

“You were a pill, that’s for sure.” You tell me you would have killed to get me to wear one of those little, white bonnets that the frog orphan wore in the children’s book you gave me the day I left for college.

“That’s out of print you know – Dr. Rabbit’s Foundling.”

“I know. You told me.”

You remind me that you wanted me to have a copy so badly that you finally had to order it after looking in “seven different stores!” You talk about the way that Baby drank from an acorn top and how the old rabbit loved that little foundling enough to let him go.

“You have to let go sometimes, too, Emmy. It’s okay to love when you don’t know when or where it will end.”

You stop the car to reach over the console and take my hand. The skin on your hands is dry and stretched tightly across your short, square bones. “Those peeper babies learned to swim because they dove in. They’re not going to fall off their lily pads. And neither will you. You have to trust me on that.” You nod into my eyes. “I don’t want you to end up like Dr. Rabbit, with a nurse and a tiny, lost frog.”

I shake my head, as though to say, “That’s ridiculous.” But you steady my cheek and trace the arch of my left brow. I smile and reach over to touch your face, too.

“Remember what I inscribed on the inside cover of that book?” you ask as you smooth the tufts of hair along my forehead.

I nod and, alongside your hand, cast your message into the night:

“It makes my bones sad that you’ll be so far away, but I know that like Dr. Rabbit’s foundling, you’ll always come back.”
Due to a quirk in scheduling, last November I spent Veteran’s Day Eve at the Veterans Affairs Hospital. Although the VA often conjures a non-flattering picture in the minds of lay people and uninitiated medical personnel alike, I found it to be a great place to visit.

And visit I did. My first task was to show up and pester the nurses into identifying a patient amenable to being interviewed and examined by me, a medical student. Next, I was to practice my budding craft until the patient could stand no more. As I approached the door of Room 127, I noticed that Mr. L. was a “gown and glove” patient, meaning that I was to wear additional protective barriers before initiating any interaction. After suiting up, I was glad I did. I’m not sure if you’ve ever seen the horror movie 28 Days Later, but it starts in a run-down hospital and features track-star zombies with blood-soaked eyes.

While not exactly “run-down,” the VA is certainly not state-of-the-art. If I were inclined to be more polite, I might describe its charms as “rustic.” Moreover, Mr. L.’s eyes were perhaps the most injected I’ve seen in a clinical scenario. Thankfully, I was pretty sure I could outrun him. He was 88 years old.

For those who are better at math than I am, I pose the following problem: 88 years old + U.S. combat veteran = ?

Give up? Mr. L. was an enlisted Army infantryman in World War II. Over the next 90 minutes, he explained to me that he had dug foxholes on two continents, in the sand, the mud, and the snow. He fought in a division that was filled with enough casualty replacement troops that it could have been built from scratch twice. He lost all his teeth at age 24 eating “gunpowder beans.” I’m still not too sure about the recipe, but if pushed, I could probably name at least two of the ingredients. I asked him if he ever had dentures, and he told me that he didn’t. Apparently the government owed him a pair and never delivered, and he was far too Yankee to otherwise complain.

He was far too Yankee about a lot of things. For instance, he still gets up and goes to work when the weather permits. He operates a crane. At the time we met, he was five weeks shy of his 89th birthday, and still earned a living operating heavy machinery. He has never needed glasses. His heart sounded like that of a 20 year-old. He takes almost no medication (an extreme rarity for a 90-year-old). He heats his house with wood that he chops himself. He lives alone. Most of all, he wasn’t really even sick by in-patient standards; the “gown and gloves” warning was a remnant
from his room’s previous occupant. He had just come into the hospital the night before to get tuned up on a few liters of saline because he was feeling a bit dehydrated. His eyes were red because he had left his sunglasses at home.

In the form of any well-trained medical student, I would like to take this opportunity to recap what we’ve discussed so far. Mr. L. is an 88-year-old crane-operating, sunglasses-wearing, wood-chopping, old-school New Englander talking to a second-year medical student with hair long enough to be his great grand-daughter. The contrast between us was stark, to say the least.

Indeed, Mr. L. cast an impressive shadow. He emanated many inspiring qualities, but I was also concerned about him. For starters, while he was a remarkably healthy and capable elderly gentleman, he had a serious psychiatric history. During the war, he explained to me that he suffered from “spells” brought on by enemy artillery attacks. After some prodding, I realized that “spells” meant stress-related black-outs. During one particularly gruesome battle in Italy, Mr. L. “lost time” for two weeks. He told me that the last thing he remembered was taking off his boots two days after Christmas in 1943, and when he woke up again on January 10, 1944 he was diagnosed with shell-shock. That was the end of his fighting, although he would have you know, it was not the end of his service. Mr. L. was transferred to the Army Corps of Engineers and continued to advance Allied efforts in Europe for another year before returning home to rural Vermont.

Today, Mr. L’s condition is better known as post-traumatic stress disorder; almost 65 years later, the symptoms remain with the man. When I inquired about supports in his life, he mentioned some neighbors, but was quick to add that “I don’t bother them, and they don’t bother me none.” Not a good sign. He was scheduled to be discharged from the hospital after I completed my exam, and it sounded like he was headed home to a lot of loneliness. Not a great scenario for someone who described the worst night of his life as the first one back in his States-side prewar bed. For most, this would be a great occasion, but for him it was sheer agony. He had been certain that he was going to be killed in battle, and for three long years in the theater of war, he had never slept in the same place for more than two nights in a row. He said that first night was awful because the more he tried to calm down, the more he saw dead bodies in front of him, and the more he felt like he didn’t deserve to be home. In some ways, perhaps a saline top-off was not all he needed after all.

The theme of contrast was again apparent, but by this time I was struck more by the rift between his introspective self and his outward persona than I was by any difference between us. I was nervous about him going home, so I continued to try to find good things in his life, for his sake as much as for my own. As the afternoon wore on, Mr. L. patiently answered my questions and shared with me the lessons of his life, pausing every so often to allow me to test his reflexes or listen to his lungs. Then, with little warning, the moment that will continue to remind me of why I chose a
career in medicine sprung up and lingered in the air just long enough to make it perfect. With understated brilliance, Mr. L. put my mind at ease with perhaps the truest statement I have ever heard told. The exchange went something like this:

Me: “So when you’re not working, and you’re not chopping firewood, what do you enjoy doing?”
Mr. L: [Brief pause, thinking critically about the question] “Well, I have animals.”
Me: [Feeling relief that at least somewhere there is a dog that keeps Mr. L. company] “Oh? What type of animals do you have?”
Mr. L: “Well let’s see... I have two ducks, two geese, 10 chickens, and a goat.”
Me: [Bemused] “A goat?”
Mr. L: “The goat’s a fool.”
Me: [Chuckling] “Why is the goat a fool?”

Mr. L: [With quizzical expression, as if the answer couldn’t be any more simple than it was] “Because he’s a goat.”

Right then, I knew two things. The first was that Mr. L. would be just fine. The second was that all those late nights in the library were worthwhile. I told him to watch out for the geese, as everyone knows they are little more than snakes with feathers, thanked him for his time, and wished him a proud Veteran’s Day.
The day of Angela’s birth found us up early. Contractions had begun at 2:30 am, and the calls to friends and family and the midwife went out around six. The morning dawned in softness, the horizon clothed in lavender and mist but the day soon became sharp, bright and clear. It was going to be a great day to be born on our little hill in northern New England, the foliage was full, and having gone apple picking earlier in the week, baskets and bowls of apples were all about the house. The place smelled like a cider mill and the room where Angela was going to be born was suffused with a gentle autumnal light. We had been preparing for this day for weeks and all was in readiness. By nine, family and friends had arrived, and our two children, Karina (age 4) and Dylan (age 2) arose from bed excited to see their new sibling come into the world, but in particular at the sight of the large birthing tub assembled and partially filled in the living room. Melinda was anxious to get outside and enjoy her labor in the open air, so she went out alone for a walk.

When the midwife arrived, Melinda was nowhere to be found. This somewhat alarmed the midwife, but I assured her that all was probably well. This was Melinda’s way. We had walked for a long time around our little hill in rural New Mexico before Karina was born and labored in the Dirt Cowboy Cafe over smoothies in Hanover before Dylan’s birth. When she did arrive back at the house, the midwife checked on her and the baby and determined that the labor was progressing nicely. It was not our first home birth, nor would it be our last. Karina had been born in a small adobe house in Albuquerque, Dylan, in campus housing at Dartmouth College, and Erin later in the same room where Angela was about to be born. But of course, Angela’s birth turned out to be something a little different.

Soon after the midwife arrived, Melinda had her first urge to push. Within a half an hour she was on her hands and knees in the living room (the tub only half full) and in the final stages of labor. I was kneeling at her side and the first hint that there was a problem came as the midwife took out her amnihook and then set it down, her face suddenly becoming very serious. I felt the first twinge in the pit of my stomach that something was wrong. That which the midwife had first thought was the bag-of-waters was instead the membranes of my daughter’s brain. The midwife kept this information to herself and Melinda birthed Angela beautifully and gently.

The next words I remember were the midwife’s, saying that “there was an issue with the baby.” When I was handed the baby, I looked at her
head in near terror, noticed her feet were not quite right as well, and could feel my life changing before me. I wanted to remain calm, for my wife, the kids and their grandparents, and that was made easier by one look at my baby daughter’s face. Her eyes were bright and without sign of distress. Her face was in fact serene, and I said to myself, “Well, if she is not going to get all worked up about this, then neither am I.”

Moments like these play themselves out in unusual ways. There was still a lot of joy in the room, although obviously somewhat darkened with concern. There was no panic. We even waited for our four year old to come downstairs to cut the umbilical cord. The midwife called down to the hospital. The other midwife, an apprentice, had arrived so there were plenty of hands on deck. I converted our van into a kind of ambulance, warmed it up to a nice temperature, and soon, Melinda, the midwife, Angela and I were heading down to Dartmouth-Hitchcock Medical Center in Lebanon.

There is levity in these moments as well. I remember my wife and I joking about Angela’s nose, that it certainly did not come from either of our families. Little did we know at the time that her nose would be one of the signatures of her rare and severe syndrome. During a brief moment of near panic I had on I-91, I looked at the speedometer of our Honda Odyssey, and wondered if it really could do a hundred and forty miles per hour. But there was no need. All seemed well in the back of the van.

We hit Hanover, and of course the red light at Main Street, and I had a moment of profound realization. There everybody was, going about their everyday business, carrying coffees from Lou’s, or packages from the Dartmouth Bookstore, talking happily in the morning sunshine. It was just another day in Hanover. No bombs had exploded, the sky had not fallen; yes, the Baker tower bells were tolling, but they were tolling for us alone. How oblivious was everyone to the tragedy that was unfolding just a few feet away in the sky blue minivan. It made me wonder, while still waiting for the light, how oblivious I was to the everyday tragedies that were probably unfolding around me.

We arrived at the hospital with little fanfare. There was simply a woman waiting for us at the emergency entrance with a wheelchair. No ambulances or doctors rushing about like you would see on television, just a simple wheelchair and a guide to take us where we needed to go. Melinda got into the chair holding Angela, and we were led through a seemingly endless subterranean-feeling labyrinth of dimly lit corridors and closed doors to a very large elevator, and finally up into the Neonatal Intensive-Care Unit (NICU).

What happened over the next five days in terms of the information that had to be absorbed, the lack of sleep, the logistics of dealing with two patients (Angela and postpartum Melinda), two small children, a growing coterie of well-meaning friends and relatives, and the difficult decisions made under extreme duress would have befuddled the most seasoned staff of the White House West Wing. I started taking notes in a little brown notebook to keep track of everything. The situation was further exacer-
bated by the fact that they would not admit Melinda into the birthing pavilion, because she had not given birth there. She was exhausted, and obviously distressed, with no place to lie down or rest, and the focus was still very much on the little baby with the large encephalocele, clenched thumbs, rocker-bottom feet, and I should also mention, bewitching tear-drop shaped pupils in the pools of her clear blue eyes.

The first doctor who examined Angela was a young resident who gave us a rundown of the family-centered care approach of the unit. The next person we saw was the most senior physician of the unit, a man a bit grave in manner, but kind and forthright. When one is in a situation like this, one looks for authority, a captain to guide the ship past dangers yet to be even imagined. I knew right away, this was the guy. He examined Angela and voiced his suspicion of some kind of syndrome. “It is not just the head. I see the feet and the hands. There is something else going on here.” This was followed by a neurologist who took one look at Angela’s head and said, “I have to be honest, I’m not sure what I am looking at here.” It was at this point that I was getting a sense we had strayed into a kind of Terra incognita, with all the attendant terrors, real or imagined, that inhabit these nether regions of the human experience. The neurologist left saying he would have “plastics” come up and take a look.

At some point the senior physician arrives with a resident and an intern. He is laying out his thoughts, and his philosophy of total transparency. He assures us that nothing that we did has caused this to happen. “It’s not because you didn’t take your vitamins (Melinda did), or that you smoke (we don’t) or drank. Everybody produces sperm and eggs that have extra chromosomes. It is just that they rarely meet, and even when they do, the result rarely makes it to term.” What we are seeing is simply the result of an unlucky roll of the cosmic dice, he insists. It is here that he first mentions the word “Trisomy”, a word that is new to me. “As she grows, things will just get worse. Babies are programmed to grow. Malformations could be found anywhere.” It was a parent’s worst nightmare: Your child has some rare and incurable condition that you have never heard of. It is as if a hole has been punched in your universe, and dark matter is rushing in. It starts to sink in that all this is adding up to the fact that this child is not going to make it. Looking at her feet and hands over the course of this ordeal, my mind had been flashing forward to scenes painful and poignant of a child, my child, in a wheelchair, by a soccer field watching her siblings or peers play. Now even these simple scenes were feeling like too much to hope for.

You bring in a child like this, where a number of systems are affected, and it is as if all the lights on the control panel are flashing red and all the sirens are blaring. People start coming and going at a dizzying rate from various specialties: neurology, plastics, gastroenterology, genetics, cardiology, and not only doctors, but residents, interns and students as well. After a while, they are all just white coats. You don’t catch their names because you are experiencing the world from within a diving bell of shock and half the time their ID badges are turned over. It seems as if
everybody wants a look at this unusual child.

The neurologist returned and the plan was changed from doing an MRI to simply getting Angela’s head bandaged in the OR. After he leaves, a very hyper anesthesiologist shows up all in scrubs ready to wheel Angela away for her MRI. He puts a release form under my nose saying something about the risks, but that it was all about “airway, airway, airway.” I read the release, not really processing it, and signed it. I have signed others since, it says what you would expect, something to the effect that the patient might die. Again, he reiterated ‘airway, airway, airway’ before I finally got a word in and said that I thought that the plan had changed, that Angela was not going for the MRI right away, but to the OR instead. At the mention of “OR”, he paused. I said, “I think you better talk to the neurologist”, and he quickly disappeared. Soon, I am watching as Angela’s small fragile body is being wheeled away on a large gurney and wondering if I would ever see her again.

Outside the rarefied, almost holy, air of the NICU, I entered into the prolific spawn of common human misery that was the surgery waiting room. Angela was reduced to the name of her surgeon on a board akin to a departures and arrivals board at an airport. I recall that the irony of this was not lost on me. Food is proffered, but it seemed too complex, too messy to eat. The magazines with news from Iraq, or the economy seemed profane. All those distant concerns simply dropped away. I had entered into a place where the lesser slings and arrows of outrageous fortune simply didn’t matter anymore, but turned to ash upon entry into the atmosphere of our unfolding family tragedy. The payphone in the corner beckoned like a call-to-duty. I needed to call my parents and give them the news. When my mother answered, it was a terrible moment. How do you tell your mother that her new baby granddaughter is severely ... I dared not even utter the word ... and that she might not live?

Then I am sitting alone in a small consultation room. I recall not knowing what to do with myself. There were books, and normally I would have taken one off the shelf and perused it, but they seemed far away and meaningless. The surgeon came in. He was a young man. He described how they dressed the wound, how the bandage would stay moist and protect her exposed brain. A week later we would be changing this bandage on the changing table in our home. He asks how I am doing and tells me he is truly sorry this has happened. He is emotional about it. It was the first moment when someone seemed to depart from professional form, where someone met me as one improbable being meets another in a moment of simple recognition of a profound human sorrow. This moment meant a lot to me. This cloak of empathy brought me some comfort amidst the cold and brutal reality of what was unfolding.

Next I am sitting alone in the dark watching the technician do the echo cardiogram. There is my daughter’s heart, in shadow, in a ghostly light, in shadow again, going waca-waca-waca. The technician moves the mouse and clicks, mouse, click, mouse, click. What does a click mean? Is a click bad? This goes on interminably: 25, 35, 45 minutes. Minutes turn to hours
and I find myself back in my high school biology class. Her heart does not look right even to my untrained eye. I remember thinking I was glad the resolution on the screen was not better, that it was best to retain a bit of mystery about these things. Later, Angela’s cardiologist would tell me the story of when he first saw a single heart cell under a microscope. It was beating as if in sympathy with some great and unseen clock that ticked away in the heart of the universe. It was at that moment, he was hooked. He knew what he was going to do with his life.

By evening, the diagnoses started coming in, and it was all bad news. My little brown book records: dura madre, arachnoid, microcephaly, hydrocephaly, ASD, VSD, coloboma, tethered chord, myoclonic, chiari two, all ugly, scary, confusing words. The descriptors are no better, attenuated, defective, anomaly, abnormality, translocation, malformation, and yet miraculously everything appeared to be working. Still, the underlying diagnosis waits. It was decision time again. Do we do a bone aspirate to get a faster analysis of her DNA, or another test that will take longer? We weighed the pros and cons of both procedures: the pain, the time, the risks, and decided on the aspirate. She mercifully slept through the entire procedure.

It was dark before I was finally alone with Angela. Well, Angela and the machines. At times I feel I can hardly breathe, as if the close air of the little room is clutching me. The rest of the world is crowded out and far away except for the monitor, which I watch with nervousness. Her SATs, BP, and heart rate numbers are bouncing about and changing colors. In the red, an alarm goes off. These alarms go right to your gut when they go off. I am sick to my stomach with anxiety. Suddenly, Angela is falling, her numbers plummeting. It is all going red. I pick her up. I am holding her, willing her back. Nobody is coming. I can feel her falling away. I won’t let her go. Strangely, it is not a moment of terror but of the most intense love. She comes back. Everything comes back. I talk to her, soothe her, and then lay her back down. When the nurses come to stick her again, I try to soothe away her suffering. You do everything you can, because it is all you can do. I sing to her the most corny and outrageous songs without embarrassment. The singing brings a strange comfort to us both. It is the simple things that sustain us in times like these.

That first night, asleep in the chair in the room with Angela, I dream of a host of strange bright plumaged birds perched in the canopy of a dark jungle. The birds are crying out at the dying of the day. It is a fitful sleep. Without rest. I awake to the machines again. They seem to be going off all over the unit. All of the children seem to be crying at once, including Angela. It is as if some kind of strange confabulation was taking place, the air itself vibrating with a kind of avian otherworldliness, the grievous cries of these poor child tragedians rising in plaintive chorus to the deaf ears of some lesser god.

Day two had almost come and gone, with more doctors, more tests, more decisions, and more tears and still we had not given the child a name. The yellow card on the side of the bed simply read “Baby Girl
Ricker.” A friend had fashioned us a woolen angel that we hung from the IV stand above her bed. Angela? It was a good start. I had been thinking of my paternal Grandmother, and the child she lost back in the thirties, a so called “blue baby.” Once while visiting a graveyard in Ohio with my grandfather I watched him pour a cup of water on the child’s grave. “I never found out if he was baptized or not,” he said by way of explanation with tears in his eyes. After my grandfather died, I found a little box with a ribbon tied around it at the back of a linen closet. Inside were notes of congratulations on the birth of the child. The postmarks were from 1934. My grandmother’s name was Frances, like the saint. She would look out for the child. Melinda and I discussed it. We named the baby Angela Frances Ricker.

On day three, the underlying diagnosis finally arrived from Genetics, the primum movens of everything else the doctors had identified. My little brown book simply records the moment:
“incompatible with life”
“failure to thrive”
“grim”
“weeks, months, not years.”

By this time we have already been broken. We are ready for the verdict that we knew in our hearts to be the truth. The pain is tempered by the reality that the child is doing well, is slowly getting free of various interventions. Tubes start disappearing, and she is starting to take breast milk from a syringe, milliliter by milliliter. The prognosis is “grim”, and she is expected to simply “fade away”, but for the moment, Angela Frances endures, and we are learning to endure as well, and to live lifetimes in every moment.

The next few days are a blur of preparations for taking Angela home. Little things began to take on deep meaning, like when we first put clothing from home on the child. “Remember when Karina wore this?” we say to each other. We took Angela on “safari”, to a little courtyard, outside to breathe the fresh air, to show her the sky, the sun, the clouds. These moments were packed with meaning, emotions running down our cheeks. It seemed almost normal, the clothing, the outside air. I remember thinking about our ancestors, for whom child losses were much more common, on them having to endure the agony and brutal necessity of clothing the body of the living child in the clothes of the dead, and of seeing the dead child in the living.

What about our other children? How are they going to handle this? There is no joy for a parent like that of experiencing the world through their children’s eyes, first snowflakes, first live concert, a frog, a dragonfly, a favorite book. These can be highly emotional moments for a parent. How do you present to your children, ages 2 and 4, their new baby sister, head swaddled in gauze, and explain to them that she is going to die? When we finally reunited with them after sweeping their new baby
sister away and disappearing from their lives for almost three days Dylan immediately demanded heroically, “Where’s the new baby! Where’s my little sister!” insisting on seeing her. These moments were like thunder within a thick black cloud, followed by a heavy shower of human tears.

There were gifts for the children, a little porcelain ballerina for Karina, a toy airplane for Dylan, a felted bonnet to protect the baby’s head, a couple of children’s books on death and dying. The ballerina becomes a drama within the drama, a kind of metaphor for the baby. First, it is left in the hospital bathroom, and then mercifully recovered after a flood of four-year-old tears. Then it gets broken. Karina is once again inconsolable. She says in full hysteria to a room full of tearful friends while protesting how much she loves the doll that, “It’s broken and can’t be fixed. Just throw it away. It can’t be fixed.” Is it the doll, or the baby of which she speaks? Her grandmother has her draw a picture of the doll, whole again, and this she carries around as a kind of totem to the doll/baby that “can’t be fixed.”

By day four in the hospital, people wanted to come. A lot of people. It soon became overwhelming. Friends we have known for years told us for the first time of their childbearing loss. We never knew. These things are kept secret, or rarely spoken of. I guess we were earning the right to know now. We had the pass-key to that other world of sorrows that people keep to themselves. We had a friend take over the coordination of our personal affairs. Anything outside the hospital room was simply too much to handle.

At one point I was told that I need to get out for a bit. An old friend was coming up from Boston to help. I remember sitting at the bus station watching the people disembark, one by one, people of all ages, colors, and sizes. “Survivors”, I remember thinking, “survivors all.” I realized that I was never going to look at the world the same way again. The old friend arrived, and I was told that I looked ashen. I had forgotten to eat again. My cheeks were feeling bruised from so much crying.

The morning rounds during the final couple of days took on the utmost of importance. We waited patiently for them, putting off food, visits, even bathroom breaks. Then the room would be full of white coats going through the growing laundry list of all that was wrong with our daughter. What they had to say did not describe the child who we were getting to know, the child she was and is, bright-eyed and full of wonder. At one point, I interrupted the chief resident saying “you know, all we have been talking about is all the things wrong with this child,” then, holding her up in my hands to show them, “well, there are a lot of things right about this child as well. Look at her. She’s beautiful.” This caused one of the interns to weep.

There was a final meeting before the floor chief left for vacation and handed the baton to a new doctor. The entire team was assembled around a large conference room table. There were a lot of tears, even among the younger staff. We discussed what would be next for Angela. Various options were proffered including leaving her at the hospital. Melinda and
I were of one mind: This child was born at home and she will die at home. In the meantime, we will give her the best life we possibly can. A plan was discussed for what needed to occur before they would release her. She needed dressings, prescriptions filled, hospice care arranged and what seemed like a hundred other things. Milliliter syringes of breast milk needed to turn into tiny bottles. Of course, the prospect of leaving the hospital was scary. How would we do? How would the end come about? Whom should we call? I had a rather uncomfortable conversation with one of the doctors about how quickly we would need to deal with my daughter’s body. Does nature allow for an unhurried goodbye? I had had some experience with this, having taken care of my grandfather at his home until he died. Answer: We’d have more time with Angela.

On the fifth day, the afternoon before check out, I filled out Form F-1005, the “New Hampshire Protocol – Do Not Resuscitate Order (DNR).” I could hardly read the form, my eyes swimming with emotion, the words “terminal medical illness,” “no resuscitation,” “signature of patient or holder of power of attorney” sticking in my throat. I remember scoffing about the “power of attorney” part. It felt more like playing the part of judge and jury, with fate waiting as executioner in the wings. At 2:37 pm on the afternoon of October 12th, 2004, I signed my daughter’s life away. At least that is what it felt like. The last image I have in my head of the hospital is of our family moving down the long corridors of the hospital, a motley procession of gifts, flowers, luggage and left-over food, finally venturing out alone into the great unknown with our little bundle of hope, fear, uncertainty and wonder.

On the road home, heading north on New Hampshire Route 10, through Lyme, was like driving through a kaleidoscope of fall colors. I was driving on egg-shells. Anybody who has ever put a newborn child in an automobile for the first time knows the feeling, driving like there is Waterford crystal loose in the back seat, uninsured, with the house payment overdue. But there was little traffic to worry about and the day was beautiful. Angela was happy and so were we.

The homecoming was joyous. We were finally home and together as a family again, come what may. Her life would begin anew, however short or long it would be. As it happened, days and weeks turned into months, and months into years. Six years of final days, and each day the story continues. It has been a bumpy ride full of many joys, pains, fears and challenges. In short, six years of the stuff of life, a life lived in the immediacy of the prospect of the absence of life. Angela has pushed us in ways that no other child could have possibly pushed us and we are stronger and better people because of it. It has often been extremely difficult and not always been pretty, but she has also been the raison d’être of our finest hours as parents, and as human beings. Through her we have met some of the most amazing people, meeting immense challenges, and living extraordinary lives. Her impact on the lives of her siblings and on the lives of those who know her in our little community is immeasurable.

Angela started school full time in the fall. This Christmas we watched
as she sat in her wheelchair up on stage with her kindergarten class at the school holiday concert smiling and laughing. This child is truly special, and it has been one the great privileges of my life to raise this child, to be part of her life, and to be able to say, and say proudly, that I am her father.
My unexpected love affair began on a frosty New Year’s Eve in Hanover in 1957, when I was dating an endocrinologist on the staff of Lankenau Hospital in Philadelphia. One of his friends had joined the Dartmouth Medical School faculty and had invited us to visit Hanover over New Years. I still vividly remember walking up the east side of Main Street toward the green under ice-laden trees which reflected the Christmas lights and, later that evening, approaching the house where the New Year’s Eve party was in full swing. Every three or four feet, planted in the snow banked along the walkway, were bottles of champagne for us to take in for the evening’s entertainment. This was the beginning spark in the lifelong flame … not with the endocrinologist, but with Dartmouth medicine. I couldn’t possibly have known that evening how significant the combination of Dartmouth and medicine would come to be a part of me, and how deeply I would come to feel in turn a part of it.

After that New Year’s, though, my relationship with Dartmouth medicine was a long-distance one for quite some time. In 1964 I married and moved to Flagstaff, Arizona, to teach at Northern Arizona University. Although I was several thousands of miles away, Dartmouth medicine found a way to sneak back into my life. My physician – also my friend and fellow environmentalist – had spent his first two years of training at Dartmouth. Although his MD degree had been granted from another institution, he was always quick to say that his skills were firmly based on his first two years at Dartmouth, and so my relationship with Dartmouth medicine quietly continued.

And then suddenly, after two decades, the affair reached fever pitch early in the fall of 1985. My husband and I were visiting friends who lived across the Connecticut River, in Taftsville, VT. I went out to jog on that early September morning and was run down by a parolee driving a stolen car who abandoned me in the bushes alongside the Ompompanoosuc River. I realized my injuries were serious, and several times while I was waiting and hoping to be found in time, the thought went through my mind, “At least there will be good orthopedic surgeons at Dartmouth.” Not only did that turn out to be true, but after my thirty-one day stay in the old hospital and many months of rehabilitation, a postcard arrived from the Friends Meeting in Hanover which invited us to attend a meeting about the formation of a Continuous Care Retirement Community. Before we returned to Arizona, my husband and I had signed up to move to Kendal at Hanover upon its completion. The proximity of Dartmouth...
medicine to my new home was undeniably the most significant motivating factor in our decision. My relationship with Dartmouth medicine had become a very personal one, indeed.

On the first day of August, 2011, I completed my first twenty years at Kendal, and during each of these my love affair with Dartmouth medicine has been a constant in my life. Through those years there have been dozens of more-or-less routine visits to the hospital, and I have been no stranger to the operating rooms. The first visit involved removal of a “huge concha bullosa” from my nasal passage. Other less dramatically named operations followed: a lumpectomy from my right breast followed by radiation, cataract surgery, open-heart surgery to replace a valve and get a pacemaker, a hip replacement (perhaps all that running?) and a nose repair and reconstruction after a recent fall. The implosion of the old hospital, which I watched with a lump in my throat, did not for an instant diminish my sense of closeness. In fact, it is difficult for me to resist the sense that the new hospital is still mine, in the same special way but in a new, and physically very attractive, body.

Beyond such “trysts” at the medical center, my relationship with Dartmouth medicine has deepened over the years to permeate my everyday life. I have recruited Kendal residents to act as fictional patients for students in the On Doctoring program at Dartmouth Medical School as well as true actors to play roles in the Center for Aging. It seemed more a matter of fate than coincidence when, out of the three-hundred-plus apartments at Kendal, the surgeon who gave up his late Sunday afternoon and dinner to repair my injuries in 1985 now lives three apartments down the hall from me.

I am 85 years old now, and as my years wind down I am grateful beyond measure for what my mind has learned and my body has experienced as part of the Dartmouth-medicine entity. I had a preview of the final aspect of my affair with Dartmouth medicine when I attended a spring memorial service for people like me – individuals who had given their bodies to serve medical students who were just beginning their own lifelong relationship with Dartmouth medicine. I am comforted to know that some as-of-yet-to-matriculate Dartmouth physician-in-training will learn medicine from my body, and thus my long and deeply rewarding love affair with Dartmouth medicine will come to a final close.
I want my caregiver to take good care of herself or himself

Kate Guernkink

Yes, I know this – yet you must hear me too. I have lived with this other presence as long as you have.

From the moment it lived in you, it lived in me. The attention it demanded, pushed me aside, and ultimately kicked me down. I got up, but with each time, less strength. And in the beginning, my strength was mighty, a “Prize Fight,” of sorts; they make movies out of this stuff.

You told me, everyone told me, to take care of myself – it was shouted at me by loved ones, when it was not what I needed to hear. There became a choice, a very personal one. It was, “You or Me, Babe,” and I chose You. Right or wrong, it was my choice ... it was my love.
Short Stories
What is Warfarin?

Charlene Kwon

What is warfarin?
Warfarin is a blood thinner. It reduces the body’s ability to make blood clots. It will not break up a clot already present, but it will keep it from getting larger.

I let the phone ring three times before I pressed the key to ignore it. I closed my eyes again to see if I could still ride the mid-afternoon, post-lunch drowsiness into some kind of reset.
I heard the beep of a text message. I kept my eyes closed. Then the phone rang again. This time I answered.

What do I need to do when taking warfarin?
- Take your warfarin at the same time everyday
- Avoid alcohol unless okay with your doctor
- Always tell all health professionals that you are on warfarin
- Carry a Medic Alert card

Atlanta smells like wood that’s been steeped in rivers like teabags. My brother’s left headlight is out. I ask him if he knows. It’s our way of saying hi, giving practical advice as soon as we make eye contact. We drive straight to the hospital and we’re both worried we’ll get pulled over.

Things had changed since we had talked on the phone, but he doesn’t give me the full report. I feel the blood resettle in my hands, my head, my heart.

The highway is pristine. We pass the Turner baseball stadium and I think about all the free game tickets I earned in high school for getting straight A’s and how I hadn’t gone to any of them save one with a friend whose name I couldn’t remember.

“They can’t do a cat scan or an MRI yet because he’s still on the respirator,” he said.

“So he’s still alive,” I say even though I knew he was. I just had to say it out loud.

I tell him how my airplane had been delayed for three hours, how they stuck us on a flight going to Orlando and how everyone had been talking about golf. He laughs when I tell him how sick I felt. We are genetically bound by our vertigo. He opens the compartment between the car seat and shows me his stash of motion-sickness medicine.
Also, while on warfarin:

- Be sure you are taking the right dose based on your blood test. You may need to record this on your calendar.
- If you miss a dose, take it as soon as possible on that day unless it is almost time for your next dose. DO NOT take two doses the next day to make up for the missed one.

There are people already in the room when we get to the ICU. An older man and woman, probably a couple, are praying loudly. They look up when my brother and I walk in. I feel violated when another woman who had her eyes closed during the prayer takes my hand.

“You must be his daughter,” she says. I nod. Everyone else in the room opens their eyes.

“He talks about you all the time,” the man who had been praying and holding my dad’s hand says. “Why aren’t you married yet?” I smile at him, politely. “Such a waste,” he adds. I’m used to this. I can do this. I break away from the attention and walk to the bed.

My dad’s face is blank in a way that reminds me of a sleeping dog, broad and content. His large eyebrows are slightly raised. Multiple tubes sprout out of his neck and are wrapped tightly around his cheeks and the respirator tube breathes rasps through his gaping mouth. He looks like he is silently screaming.

I can smell the accuracy of the hospital. He had taken their medication thinking that it would make him invincible. He had always trusted the science.

Call your doctor for:

- Any serious injury or fall
- Before scheduled surgical or dental procedures
- Any unusual pain or swelling
- Sudden headaches, dizziness, or weakness

The night nurse, seeing my brother and knowing that he speaks English, enters the room. She is small and compact and even shorter than the scattering of Koreans. She is loud. “Has he had eye surgery recently?” She shouts. She eyes the people in the room. She had been avoiding them with all of their singing and punctuated “amens.”

“Cataract surgery,” my brother answers. She nods and explains that the eye wouldn’t dilate. I wonder if we should add that he had also had gallbladder surgery in the last year and bypass surgery after a heart attack before that. He had been falling apart for a while.

One of the women abruptly pulls me away from the bed. She looks surprisingly young to be friends with my dad. “God told me that he wanted to meet him,” she whispers. “This is his way of saying hi.”
Two weeks later he is moved upstairs. There has been progress despite the depressing diagnosis that he would never wake up again. My stepmother practices counting with him. We ask him over and over again to say our names. He just barely responds, but our ears are optimistic. My stepmother tells me over and over that he can pucker his mouth when she asks him for a kiss and that somehow this is the most important thing.

We poke fun at him to make him smile. We ask him if he’s enjoying the liquid food pumped into his stomach. We tease him with trips to the Korean restaurant where we will fill up with jijae and fried fish. And he smiles and smiles.

Tonight we are watching Seinfeld together. I try to ignore the fact that the nurses had just changed his linens after a bowel movement. On the TV, George’s dad is telling Kramer about Festivus, the holiday he made up so as not to feel left out of Christmas every year. I find that I’m jealous of George. I find that I’m jealous of all of these people on television, because despite their fallibilities, no one died in sitcoms or was terminally ill or had recently had a blood clot at the base of their brain.

He has started to snore. It is deep and sonorous and I remember how I would wake him up in the middle of the night and then run back to bed so that I could fall asleep before the snoring started up again. It never worked. But today it is a good sign that he is snoring and I am giddy when Jerry’s girlfriend accuses him of cheating on her with Elaine over Festivus dinner. When the episode ends I switch it to the Weather Channel.

“Look, dad, it’s going to rain,” I say.

“And then it’s going to be sunny again on Thursday,” I say.

“In fact it’s going to be sunny all the way through the weekend,” I say. It’s obvious that I’m boring him as he continues to snore away. I turn off the television and leave the hospital, looking forward to all that sun.
On the Ninth of September 1998 Ben Hirschfield returned home from work at six-thirty to discover his wife sitting up in bed reading. Hirschfield inquired affectionately:

“Hey, you O.K.? What’s wrong?”


Her husband furrowed his brow. He ate frozen pizza alone that night. At the same time the following evening, Mrs. Hirschfield was still in bed.

“Should I call Dr. Pasquali? You don’t look so good.”

Mrs. Hirschfield’s face soured. “Please stop worrying. I’m fine.”

“No, I’m sorry. I’m worried and I can’t see you like this. Rita, it isn’t healthy!”

“Oh, Ben,” she waved at him, “there’s nothing healthier than what I’m doing. Just look at all of these,” motioning to the twisted stacks of books on the floor.

“I’m going to give Dr. Pasquali a call,” said Hirschfield, decisively. “Dr. Pasquali!” Rita said contemptuously, “Honey, a woman knows her body better than anyone else. And I’m telling you I’m fine.”

“Are you sure?” asked Ben thoughtfully, “I just want you to be sure.”

“I’ve never been surer in my life. Now listen my dear,” she cleared her throat and pointed in the air, “happiness is beneficial for the body, but it is grief that develops the powers of the mind,” smiling, expecting gratitude for wisdom on loan.

“Hmm,” Hirschfield put a hand on his stubbled chin in feigned thought. “That’s Proust, honey. I’ve been reading him all day. I’m going to read all of his works.”

“All of them?”

“Yes, hon. What’s the point in just reading some? People always read some of the great works. It’s like… taking a sip from the spring of knowledge,” Rita held out her veiny hand histrionically while a forced simile emerged from chapped lips.

“I suppose. But it’s a lot, isn’t it?” he said irritably.

“Yes, Ben,” she glared at him, “it is.”

“Seems excessive to me,” he got up with a grunt and walked to the kitchen.

“Well, I don’t think it is,” she took her glasses off, “and you’re not the
one with an internal clock that is ticking,” Rita managed amidst a wet coughing spell.

He froze holding the refrigerator door open. “No one said it’s definite. I mean, Pasquali, Carnicelli, Weinberg, all of them, they—”

“Weinberg!” she yelled scornfully.

“Yeah,” Ben turned around quickly, “even Weinberg. Who—may I remind you—is an expert in the field,” he wagged his finger.

“Heh, ‘Weinberg the Expert.’ Oy vey,” she rolled her eyes.

Ben tightened his lips and muttered something unintelligible.

“Ben, let me tell you something,” she cleared her throat again, “I read about this thing they mentioned—this so-called ‘Cyber Knife’. Doesn’t it sound exactly like something the Terminator would use?” She didn’t wait for his response.

“I mean, just the name of it gives me the heebie-jeebies,” she shook and winced. “Anyway, at least two people on the support group posted some scary things about it. One said he—”

“Rita, people say a lot of things online, especially when it comes to cancer. You know that. Look, you remember that guy from Maine talking about the orgone box? Well—I wouldn’t take his advice, the fucking nut.”

“And Weinberg?” she smiled, “he’s so sensible. I mean, a guy like him, listening to Wagner as he cuts people open, is so—”

“Rita—”

“No, I’m serious. I would have liked Vivaldi, Beethoven, anyone else, really. But Wagner? The same music my grandfather heard when he was in Auschwitz, lovely.”

“Jesus Rita.”

“I’m sorry, the whole idea just has me scared,” she teared up as her brittle voice cracked and she waved her hands up, “They want me to be some hopeless turkey on a table being sliced up by some crazy robot or something.”

“Hey, Rita. Hey, it’ll be O.K. honey. I’ll be there.” He sat next to her and stroked her thin brown hair.

“And the worst thing,” she blew her nose, “the absolute worst thing about this whole nightmare is that when I’m gone I won’t leave anything for posterity. Nothing.”

Ben tried unsuccessfully to suppress the quizzical look he often wore.

“What do you mean?”

“I mean, look at all of this,” she motioned again to the stacks, “Proust is long gone. He’s dust and bones, and no one’s going to forget about him. All those years in isolation, writing his heart out in some crazy cork-lined room and he—”

“I’m not going to forget about you, you know that?”

She looked at him with hollow blood shot eyes.

“And I’m definitely no expert on this Proust guy—you know—but he never had someone by his side to love him did he?”

“Well, I’m not sure. Not exactly. No, I don’t think so.”

“See, I’m with you the whole way,” he clasped her hand, “I’m not go-
ing anywhere and neither are you.”
“Promise?” she breathed.
“Promise.” He smiled and she noticed a deep furrow of concern on his forehead.
“Cyber Knife,” she announced with pizzazz, “as seen on TV—get one free when you order our Ginsu set. Only three payments of $19.95 and, wait, there’s more, if you call within the next thirty minutes, we’ll throw in Dr. Weinberg’s juicer. Act now.”
He laughed; the first profound one he’d had in months.
“Do you still love me?” Rita asked softly.
“Still,” he tightened his lips.
“Even though I drive you crazy?” she looked up.
“Yeah… even though…”
“You can say it honey.”
“Even though you sometimes make me nutty.”
She smiled, her dimples rising among the dark waves of wrinkles on her face like two bright suns, “I’m sorry I’ve been so damn bitchy lately. If it’s not the hormones making me sweat, it’s this God-forsaken medication making me sick or the cancer making me itch or the—”
“Rita stop. It’s fine. And you know what… don’t go around saying no one’s gonna remember you. Don’t say that stuff. We’ve got Eric, and I know he’d be hurt to think you think he wouldn’t remember you. You know how sensitive he is; it’d kill him,” he sighed and shook his head, “Absolutely kill him.”
“Oh Ben, of course he’d remember me. I’m his mother; he couldn’t forget me even if he tried. And just between the two of us, you know he’d wanted to at times.”
“Maybe—but that was back when he was a teenager. What teenager doesn’t hate his parents every now and then? It’s healthy,” he smiled wistfully, “I mean; he even hated us with politeness, Rita, if I remember correctly.”
“He’s always been so sweet, hasn’t he Ben?” she started crying again, this time in suppressed sobs, “and I feel so guilty talking about him like this but—”
“Go ahead, Rita. It’s just the two of us here, like it’s always been.”
“But the thing is, he’s never going to have a family. He’ll never have children or grandchildren and I hate think of him alone anymore.”
“You don’t know all that for sure. That he’ll never have a family, I mean. It’s the 90s, laws can change and—”
“Ben, you know what I mean,” she closed her eyes as tears streamed down, “I never judged him for what he was. I know you did, even if you never admitted it,” Ben opened his mouth but she held out her hand, “and that’s O.K. now. Because I won’t be around much longer and I don’t have the energy for resentment. I just don’t.”
Ben swallowed heavily and fixed his glassy eyes on her. He tried to speak but to his horror only a thick mumble emerged from his mouth.
“Honey,” she clasped his hand, “promise me you’ll be good to him. I
know you never had your dream son with football pads and prom dates, and that you—

“Rita—”

“Ben, just let me finish,” she took a sip of the bulky orange drink at her bedside.

“I knew,” she cleared her throat and wagged her finger, “back when he was ten, I knew. He’d dance around when I played the Chorus Line on our stereo. Hell, he did more vacuuming then I did,” Rita laughed and shook her head.

Ben stared at her with a burning intensity that could melt a titanium shell.

“And you know, like I said it never really bothered me. When he was twelve, and the Rabbi—you remember Rabbi Nachman?,” she continued “he said he didn’t know how Eric could memorize the Talmud like that—that he must be cheating or something—I just knew he was special. In more ways than anyone else knew.”

Ben looked at one of the many plaques on the wall opposite the bed.

“Yeah, he wasn’t cheating when he earned those, Benny.”

“I know; I never thought he cheated.”

“Fourteen and at Columbia; the Hell were we thinking?”

“I don’t know. What the hell were they thinking? That’s what I still wonder about,” Ben shifted in his seat. “That guy told us he was even younger then the wunderkind kid from Korea back in ’84.” He looked away momentarily. “What was that guy’s name from the school? Dr. Webb, I think. You remember him?”

“How could I forget him?” she snorted, “He kept calling me Rhea.”

“That one’s crooked,” she sighed, pointing to a plaque that hung evenly amongst the rows of commendations, degrees and awards.

“I’ll fix it later,” lied Ben, not looking.

“Sure. There’s always later, right honey?”

Rita looked out the window to her left and sighed.

“What’s wrong, sweet heart? Want something to eat?”

“No, I think I’m going to get back to this,” she tapped the weighty book.

“O.K. I’ll be on the couch reading the paper.”

“I know that, Ben. That’s your spot. It’s always been your spot.” She smiled, and he noticed the heavy dark rings that bordered her hazel eyes, magnified by her thick glasses. It was an unflatteringly, unforthrightly angle, and he had to look away.

Ben read the sports section with inordinate concentration, reading and re-reading the score box that stated with no surprise to most borough-dwellers that the Mets had lost.

“Rita, did I tell you he called last night?” he spoke from behind the page.

“Yes Ben, at least twice,” she didn’t look up from the thick volume.

“Oh,” he swallowed and continued.

“I thought it was good to hear his voice.”

Rita shifted audibly in the bed. “Did he say when he was coming up?”
“No,” Ben folded the paper and placed it on his lap, “no, he didn’t. But he said they’ve got him writing a big piece. Deadlines and things.”

“He’s always so busy, isn’t he? I guess the Times really—”

“Actually, it’s the Village Voice.”

“Whatever.”

They both glanced at the TV which had been on the whole day. It was muted, but always in the background, like animated wallpaper. Ted Danson—as the cantankerous Dr. Becker—was smoking a cigarette while canoodling with a smiling brunette displaying impossibly white teeth and fantastic cleavage.

“I’d like to go see him.”

“Rita—”

“Ben, listen. We can drive there; we’ve done it before.”

“I don’t think that’s such a good idea,” he tossed the paper towards the leather ottoman but missed.

“Why not?”

“Well—first of all—he might not even be there.”

“So we’ll wait.”

Ben sighed again and placed his slender hands over his eyes.

“Come on,” Rita took another long swig from the glass, “Ah,” she burped just perceptively and put her wrinkled hand on her chest, “You know, I’m feeling a lot better. And I could use the fresh air. It gets the blood flowing and—”

“Fresh air?” he said through his fingers, “the trees are affixed to concrete, Rita.”

“Ben, I’m telling you I want to go. And if you won’t, then I will. I just miss him so much and—”

“Stop,” he looked up, took a deep breath and held out his left hand flat, “Just stop. I tell you what; we’ll go in the morning. Let’s just get a good night’s sleep and—”

“No,” her voice was brimming with sorrow, “I can’t wait any longer.”

She swung her wrinkled bluish feet over the bed and onto the cold wood floor.

“I can handle myself, you know,” she eyed him as he glared at her.

“I never said you couldn’t.”

“All those years working in that dismally dim place. Through three different bosses having four different heart attacks. And a stroke. I forgot about Irving’s stroke—the poor schmuck. No, I’m not in as bad shape as the naysayers say.” Wheezing mightily, Rita propelled herself up on spindly arms, dotted and blotched with IV marks like a nightmarish constellation.

Her husband continued watching her as a concerned parent would; whose chubby, asthmatic son is about to start a marathon.

“I’m going to go get my coat,” she walked unsteadily towards the bedroom while Ben stood up halfway. “Sit down, dear, read your paper.”

Just as he sat back down on the couch he heard a loud crash.

“Rita!”
Rita Karol Hirschfield lay sprawled on the floor; eyes glazed and fixed on the ceiling.

“Oh God, Rita! Hey, honey, are you alright?”
She breathed something but he had to lean in, his hand on her cheek.
“That’s it, I’m calling Dr. Pasquali,” he stood up trembling, “hold on, let me call him, he’ll have—”
“Ben, no.”
“What’s that?”
“Come back, honey. Please,” she attempted to sit up and gasped for air.
“Rita, hey, just hold on a sec. Let’s get you back up.”
He carried her back to the bed, nearly tripping over one of the taller stacks.
“Let’s get you all covered up here; you’re shivering.”
“I want you to call Weinberg.”
“Weinberg?”
“Yes, and don’t make me ask again.”
“But he’s a radiologist.”
“So?”
“So they said—”
“They said, they said, they said!” she wailed.
Ben recoiled.
“I’ll call him,” he backed up slowly, still looking at her.
Volumes six and nine of Proust’s novel were located immediately behind him, toppling like rickety towers and taking down Ben Hirschfield onto his fleshy backside.
“Ben?”
Ben didn’t answer right away, but he began to chuckle. He laughed until his ribs ached, and that’s about when Rita joined in. She noticed the persistent, pernicious pain in her chest subsided for a moment. When they were finished, Ben made the call.

Meanwhile, with little care and a lot of help from the slew of opiates that saturated her brain, Rita made the following list:

Things I like:

Ben’s soft hands
A cup of chamomile tea
A birthday card from Eric
Lionel Ritchie (after the Commodores)
Dogs (esp. beagles)
New Yorkers
Seeing a matinee of Shakespeare in Love with Ben
Tina Brown

Dislikes:

Girls with tattoos

Lifelines 88
Two minutes later Ben returned.  
“Well?” she asked above the large yellow notepad.  
“Well, he’s not around.”  
“Where in the hell could he be?”  
“They said he’s in the middle of something.”  
“Jesus,” she sighed, “what could be so important?”  
“Rita, he’s busy; you know that.”  
“I know, I know.”  
“Plus—I mean—what do you expect from him?”  
“I don’t know,” she looked away, “I guess I want him to tell me something I want to hear.” She tapped her pen against the pad, “I just read this morning that the root word in radiology comes from Latin, did you know that?” Ben shook his head as she nodded, “the word ‘radial’ means light. So I guess I want him to shed light on things, huh?”  
“Hm.” Ben put his hand back on his grayish prickly chin.  
“I guess you’re right, though. I’ve seen all he can show me. But I’ll tell you, I think it’s crazy that —” she was interrupted by a coughing spell that convulsed her entire body and nearly sent her over the bed.  
“Rita.”  
“Ben, no,” she held out her hand.  
Silence entered the room.  
“Just do me a favor.”  
“Anything, dear.”  
“Just stop being such a good person.”  
He furrowed his thick dark brows.  
“It made me seem like a wench for the last ten years or so. Maybe twenty.”  
“Why didn’t you say anything?”  
“I don’t know. You’re just too nice; you’re too good to an old battle-axe like me.” Her rheumy eyes welled with thick, salty tears.  
“Stop it. You deserve it,” he smiled weakly; “you’re my little Rita-Meter.” She managed a smile but now it only made her face look more haggard.  
Ben sat with her for another three hours, two hours and forty minutes after she fell asleep and thirty minutes after she died. After contacting the visiting nurses and the hospital, he sat down on the couch with a heavy groan.  
The phone rang but he didn’t answer it.
Monica’s medication cart rattled down the hallway. The paper cups honeycombed across the top displayed a rainbow of colored pills. White for Mr. Murphy’s high-blood pressure, those tiny blue ones for Mrs. Smith, and the fat yellow ones ... she sighed. Better check each name twice. Last week, Susan nearly gave out the wrong medication. Doesn’t surprise me, Monica thought, always understaffed, overworked and bleary eyed from lack of sleep and then some doctor strides in like a puffed up rooster barking orders and waving his Rolex in front of our faces.

A soiled smell clung to the stagnant air in the corridor outside Room 1017. After all these years that smell still made her stomach heave. Two aides called in sick so Mr. Murphy would just have to lie in those dirty sheets until she could get to him. The abandoned food carts waited at the end of the hall like silent sentinels reproving her for not taking their contents sooner. The patients would get cold food tonight. Not that most of them would know the difference. The staff propped them up in lounge chairs like stiff stacks of cordwood, their vacant eyes staring into space, their slake mouths spilling moans and cries that wavered from the nursing station down the hallway and through Monica’s aching head. It’s all mashed up anyway, she thought, like baby food. Monica spooned the bright yellow and orange mush into their sagging mouths and watched impassively as it dribbled down their chins. There’s no one really to talk to at work she thought.

She slammed the phone down. Hard. “God damn it,” she shouted at the silent phone. “Don’t they think anyone has a life outside that place?” She paused and wondered if she did and then said, “I have a life outside that place. Why the hell can’t they schedule things right so they don’t have to call me in on my day off?” She picked up the receiver and slammed it down again hoping that would make her feel better. My own fault, she thought. I should get an answering machine.

She stared out the kitchen window at her new red Pontiac parked in the driveway then frowned as she noticed Barb and Roger’s battered 1986 Chevy Suburban parked along side it flaking rust so badly from the fenders that she had to drag the hose out and wash the orange stains from the asphalt every week. When Barb drove it around town hunched over the wheel, her scrawny neck craning out the window, she left a trail of smoke behind as the muffler farted blue blasts of exhaust. People stopped to
stare. But all Roger would say was, “Can’t have too much steel around you. Besides new cars aren’t worth crap,” as his index finger moved to push his large square black glasses which were always slid half way down his long pointy nose back into place. Roger, Barb and the kid lived in the other half of the duplex. She could hear them through the flimsy walls; the kid crying, the TV blaring and Barb’s high pitched laughter rising above the clamor like a lusty soprano practicing her scales.

In summer, Barb spent most of her time lounging on the rusty lawn chair in the backyard toasting her pale skinny limbs, hip bones jutting into the hot sun as she squirted her body with furious puffs of water from an old discarded Windex bottle. In winter, she traded the lawn chair for the faded couch with broken springs and flipped idly through daytime TV while talking on the phone, her loud laughter breaching the flimsy apartment walls. Monica could never distinguish individual words, only the muffled droning interrupted by that laugh. She moved quietly around her own apartment, hoping to hide from Barb’s perky call across the back stairs.

“Oh, neighbor? Are you home?” Monica cringed as she heard Barb’s voice sing the greeting in a cheerful chirpy way. Too late now to pretend she wasn’t home. She opened the door. Barb was sitting on the steps in the back hall holding a cup of coffee, smoking a cigarette and wearing that same shapeless housecoat she seemed to wear everyday. Monica wondered if she bought them by the dozen on sale at the K-Mart where Roger worked. Always the same drab faintly brown color but the pattern seemed to change every so often. She squinted at the vague shapes and swirls while trying to ignore Barb’s chatter. Yesterday, it was some sort of floral pattern, today it was geometric but it was definitely something that her own mother would have worn like a grocery sack packed with her flabby stomach, bulging thighs and buttocks the size of New Jersey. But this one swallowed a thin and wiry Barb in its shifting patterns. Her head poked through the top with a ragged mass of multicolored spikes that she cut and dyed herself. Monica patted her own lank brown hair and wondered if the money she spent every two months at Giorgio’s salon was worth it. She kept going because she hoped the tall handsome hairdresser meant something more when his fingers lingered as he massaged her head in the shampoo sink. Was she only imagining it? Probably. But she was on the other side of 30, hadn’t been out with a man in over a year and wanted more than what her vibrator could give her. Her plain features were made worse by a small mouth crouching under a big nose while her pear shaped body struggled to ascend from her too thick ankles. Monica was able to ignore the nagging thump of her biological clock knowing that at least she wasn’t stuck with Roger and a dopey kid and when the silence in her apartment beat against her brain like some neglected flappy door; she turned on the television.

“Coffee?” Steam from her mug circled slowly around Barb’s head and drifted through the messy spikes of hair before mingling with the cloud of cigarette smoke floating towards her door. Monica leaned into the smells,
breathing deeply savoring the rich aromas. “Can’t. They called me into work.”

“Bummer.”

“Serves me right for answering the phone. I thought it might actually be someone I wanted to talk to.” Who might that be she wondered? “Three. I have to be at work at three.”

“Stop in after work.” Barb waved her mug as Monica closed her door. “I have a jug of white wine.”

Just before two she stepped back into the kitchen to retrieve her uniform from the dryer and heard the kid’s ball bouncing off the aluminum siding of the garage. It was Roger’s day off so he was strutting around the yard in his army fatigues watching his kid throw that ball, ignoring the dents it left behind on the siding. The kid was a big five year old, stocky and solid like a miniature linebacker; he liked to brag that he weighed sixty pounds. His straw cowboy hat bounced against his back and his mouth clutched a black snorkel tube that jerked back and forth in furious spasms as he chased after his ball. When he stopped to rest he placed his hands on his knees and blew frantic puffs of air out through the tube. Monica thought he was a weird kid, couldn’t remember his name and tried to avoid being around him. She hurried out to the yard when she saw the hard yellow ball bouncing nearer to her new red Pontiac.

“That ball is landing way too close to my car.” She planted herself between the kid rifling the ball in his mitt and the front fender of her car. The snorkel jutted upright from the kid’s mouth and he blew soft easy puffs through the hard plastic tube.

“Man, new cars aren’t worth crap these days.” Roger said. “Find something like ours and you won’t have to worry.” He bounced the ball off the hood of the Suburban and he and the kid watched as it soared above their heads, bounced down the length of the driveway and rolled into the street. The kid ran after it, clumsy in his red and black cowboy boots while Roger pointed to his car and said, “No damage done.” Monica turned and went back to her apartment where she spied on them from the window as Roger talked earnestly at the kid’s bent head. She wondered if he was scolding the kid or coaching him on how to perfect his aim so that the ball would ricochet from the garage to the hood of her car.

That kid’s aim was all right she thought. She had seen him through the window last week peeing out in the yard aiming at the rose bushes along the fence. Barb had run into her apartment screaming, waving her arms like a maniac and Monica had thought the place was on fire. But Barb had only wanted Monica’s camera to take the kid’s picture as he peed into the bushes. Monica wondered what child development milestone Barb thought peeing on a rose might represent. Monica was glad she wasn’t the landlord. She would occasionally take Roger’s copy of *American Rifleman* where it stuck out of their mailbox like some kind of flag before he got to it and tossed it in the recycling bin. She wondered if he was planning on joining one of those fringe survival groups. She pulled her uniform out of the dryer and went to change.
Dr. Frankle’s fleshy hands fumbled noisily through the rack of patient’s charts. Monica frowned at his dopey smile which always seemed to rise suddenly above the nursing station like some lost sliver of moon as she was trying to finish her paperwork. Even if there were five other nurses standing around (which there never were) he always stood right in front of Monica like he was waiting for her to say something, smiling in that dopey way. Small points of sweat now peppered his forehead as he wrote in the chart. He shook his pen at a space beneath his nose. “Damn things out of ink,” he mumbled. His eyes faded in and out behind the thick lenses of his glasses as he shifted his weight from side to side. Always demanding something, she thought as she tossed a pen in his direction. He flipped the pages of the chart back and forth. “I can’t seem to find Mrs. Schutz’s last temperature.” His round pudgy face waited. Then he suddenly blurted, “I know this nice place for lunch. The Captain’s Schooner.” His shoulders swayed as he tapped a pen on the counter. He rocked back and forth as one hand fluttered to wipe the sweat from his forehead. His lips crinkled into a nervous pout. “If you ...” he began. Now they have to brag about fancy restaurants, she thought. Like I can afford a place like that on the money I make. She slammed her pen down and stalked off to take Mrs. Schutz’s temperature.

She unlocked the back door glancing at the kid’s crayon drawings taped to Barb’s kitchen door. She thought about stopping but wasn’t sure she wanted to listen to Barb’s endless fascination with coupons clipped from the newspaper, sales in progress, or the latest misfit on daytime talk television. Monica winced when Barb quoted directly from the National Enquirer. It was bad enough she had to read the headlines while standing in line at the store. But tonight she wanted a cigarette. And that meant she’d have to stop, only for one of Barb’s cigarettes. She’d have just one. She would allow herself this one breach of good sense. It was after midnight but Barb’s head popped out from behind the door, startling Monica like one of those grinning jack-in-the-boxes. She held a cracked juice glass of cold white wine and a slender brown cigarette. Monica placed her foot on Barb’s first stair.

Dirty dishes were piled on the counter, ashtrays overflowed, newspapers and magazines were stacked on chairs and tables, some spilling onto the floor and a faintly greasy smell lingered in the air. They sat under the small circle of light that spread over Barb’s cluttered kitchen table from the wagon wheel chandelier. Darkness and silence soaked the apartment, as Roger and the kid slept. Monica pulled the harsh smoke deep into her lungs, feeling the dizzying swirl in her head. This cranny of quiet in Barb’s kitchen dissolved the irritating racket that she had carried home in her head from the nursing home. She sipped the cold white wine while savoring the cigarette, listening to the steady drip from Barb’s leaky faucet when she suddenly realized that Barb’s chatter was not filling the silence. “I worry about Roger,” Barb said when Monica looked at her. “Hates his job. Has a knot between his shoulders the size of Texas.” She laughed softly. Monica imagined Barb’s long thin fingers mashing Roger’s shoul-
der blades as he sat hunched over the table, the weird kid in his Spider- 
man pajamas leaning into his father’s lap. “We never have sex anymore. 
Well, almost never,” she sighed. “I’m pregnant.” She gave Monica a fear- 
ful smile. “He talks all the time about moving out west. I don’t know. If it 
makes him happy.”

Monica knew what Barb meant. One late summer evening, while 
standing at her kitchen window she watched the two of them sitting in the 
rusty lawn chairs in the back yard. Roger’s voice floated out into the quiet 
yard, rising and falling like a far-off siren wailing into the night. “Some-
times I don’t think I can take it anymore,” he told Barb. “I feel like I’m in 
a cage and they’re rattling the bars. They stare, demanding things.” Roger 
moaned and told Barb about a red-faced woman pounding her fist on 
the counter, his complaints swirling in a mad dance with a night cricket’s 
song. “Ranting about the high cost of prescriptions. It’s not my fault,” he 
told Barb. “I’m only the pharmacist. I don’t set the prices.” His hands lay 
helpless in his lap. Barb had lit another cigarette and then took a huge 
gulp of wine. Her voice followed Roger’s out across the lawn and Monica 
heard only the cool shades of sympathy in Barb’s voice, “I know Baby.”

She stood unmoving at the window feeling the warm night air brush 
against her face, swirl around her bare arms and enclose her in a soft co- 
coon of mystery. Stars wrapped the night sky in a blazing arc of wonder. 
She moved from the window, her shadow crossing the lighted square of 
glass and breaking the flow of light out into the yard. Barb and Roger 
turned in their chairs and saw only the empty window of Monica’s kitch- 
en.

Maybe it was the wine or the cigarette but tonight, before she knew it, 
Monica was exposing those sore spots and emptying the corners where 
she buried her complaints as she nudged her cart down the hallways at 
the nursing home.

“Someone’s always calling in sick and you can’t get the aides to do a 
damn thing. And then some hot-shot doctor waltzes in and starts throw- 
ing around orders like you’ve got nothing else to do. And tonight that 
bastard actually hit me.” She could laugh now sitting across from Barb, 
but she was afraid when it happened. Mr. Murphy’s long bony fingers had 
gripped the side rail, his teeth clenched in a fierce grimace as she tried to 
strip the soiled sheets from his bed. Then the wailing started with those 
stretched out moans that went on forever. Calling for his dead wife, his 
eyes had tried to force something from Monica as she felt them staring 
into her own. And when she had closed her eyes briefly just to break that 
stare and smother the rising panic in her throat, he hit her. Raising a shriv- 
elled arm, he smacked Monica right across the face. “I don’t know how 
much more of this I can stand,” she told Barb after her third glass of wine.

“Boy,” Barb said, “I’m glad I don’t have to put up with that crap.” She 
shook her frosted spikes and took long deep drags from her cigarette. 
They talked softly into the night. Barb poured another glass of wine and 
jabbed the cigarette at the mound of dead ones, then yawned at the clock.

“Sometimes I feel like driving my car right into oncoming traffic,” Mon-
Lisa said. “Or through the guardrail on Cermak Bridge.” A small shudder of fear passed through her mind. Oh yeah. Her dream. Pressing down on the accelerator. Hard. Crashing through the squealing metal and soaring in a high wide magnificent arc through the silent starry night. She seemed to float forever, drifting through a hazy space. Fingers froze to the steering wheel while a never-ending moan dribbled from her lips, eyes staring intently into the black boundless void. “It’s getting so bad, I’m having dreams,” she told Barb.

“Boy, I’m glad I don’t have to put up with that crap.”

Monica went home and wandered around her silent apartment, dusting the silk plants, adjusting her porcelain treasures. She turned a small spotted owl in her hand. Its fierce eyes stared like Mr. Murphy’s had when he gripped the siderail and moaned for his wife. “I should get a cat,” Monica said. “Name it Fluffy,” she said and laughed. But they puke hairballs all over the carpet and leave piles of dirty fur on the furniture she thought. She turned off the tinny laughter from the television. Just before dawn she drove past the spot on Cermak Bridge that she dreamed about.

She woke late, sprawled on the coach, and saw two plumes of smoke from a burning ember trail across the television screen. Upturned faces drenched with fear. A talking head in a blue suit. Smoke spiraled into the sea. Monica flipped on the sound. “All seven crew members aboard the spacecraft Challenger were killed this morning when what appeared to be an explosion occurred shortly after lift-off at 7:53 a.m. Eastern Standard Time.”

“Jeez,” Monica whispered. The pounding on her back door dragged her from the television. Roger’s eyes wrenched her from the apartment. He pulled her down the back stairs, his mouth flapping open and shut, no words, only low moans as his arms sliced the air in front of them, forcing their bodies through the space, never letting go of her hand. Her thigh slammed into a table as they plunged up the stairs. She squinted into the bright bedroom light.

“There’s something wrong with Barb,” poured from his mouth, crashed and bounced against the walls. He turned in small frightened circles. Cold sweat poured down Monica’s back. She saw Barb’s body curled on the floor, arms cradling her head, knees drawn up tight against her chest. “I called 911.” Roger’s voice floated somewhere above her head. Monica knelt and tried to turn Barb towards her. She moaned softly and Monica felt a weak thready pulse.

“Come on neighbor,” she said. Lifting her head, Barb’s eyes fluttered open and stared into the wall. “Barb, can you hear me?” Monica said. Her hands searched along Barb’s body, searching for clues, searching for signs. Pages from her nursing textbooks filled her head. Charts, diagrams, red swollen organs, hearts lined with fat, lungs black from smoke. Black squares hide their faces. Only pictures in a book. She tried to tear those images away, they offered no help. They offered no hope. Concentrate she thought. She held Barb’s head as her thready pulse drained away. The paramedics swirled around Barb, blocking Monica’s view. They bundled
her in a blanket, strapped her to a stretcher. Then she was gone.

Two plumes of smoke trailed from the burning ember hurtling through space. Over and over, all day long, Monica watched the replay on TV. The smoke from her cigarette trailed in a wide arch as she waved it back and forth through the air. Her supervisor demanded to know if Barb was a relative before she would excuse Monica from work. She couldn’t go to the hospital; only relatives allowed in intensive care. “What a bunch of crap,” she said. Smoke trailed across the sky. Fell into the sea.

Roger’s face was at the door. “Barb’s dead. A vessel burst in her head. We were making love. She said her head hurt.” He closed the door to his apartment.

The blue light from the television flickered up and down the walls. Her throat ached from the cigarettes. When she closed her eyes, the two plumes of smoke trailed across the dark spaces in her head; a tiny vessel hurtling through space, a tiny clot hurtling through a body, a car careening off a bridge.
During the Christmas holidays in 2001, seven babies died within ten days in my hospital’s Neonatal Intensive Care Unit. Infant mortality is expected in the NICU, but even by our normal standards, this holiday season was unusually grim. I was a bedside nurse at the time and thanks to drawing the short straw in nursing assignments, five of those babies belonged to me. I heard the beep of a text message. I kept my eyes closed.

The night began typically enough. The normally bright unit lights were dimmed; the monitors and ventilators hummed, pinged, and beeped in reassuring rhythms that nurses understand. My side of the unit was full – eighteen babies, born between twenty-two and forty weeks gestation and ranging in size from kittens to puppies, slumbered in incubators and on warming tables.

It was two weeks before Christmas and I was doing a string of night shifts. Coming in at 7 p.m., I studied the assignment sheet and discovered I was the Resource Nurse for the shift. I saw that part of my assignment was Alyeesha, a girl born at twenty-two weeks gestation who was now six months old. I groaned inwardly. Alyeesha was not an easy assignment; her care was very labor-intensive. She was not my primary patient, or even an associate patient, but I’d often cared for her, and the outgoing Resource Nurse thought we’d be a good match until 11 p.m., when Alyeesha’s Primary Nurse came on.

“Sophia will be in at 11,” said Laura, the outgoing Resource Nurse as she gave me Resource Report. “Then you’ll pick up Jason because Angie’s doing an E.” An E shift was 3 p.m. to 11 p.m.

“That’s fine,” I said. “I’ve taken care of her before.” Finishing Resource Report, I walked over to Alyeesha’s bedside. Her nurse for the shift, Jamie, handed me her information sheet we called a kardex.

“How are ya?” she asked.

“Good. How was she today?”

“Kind of the same. Ready for report?”

“Yep. Bring it on,” I said, folding my sheet in half to write on the back.

After report, I put down my kardex and peered onto the warming table where Alyeesha lay. In layman’s terms, almost every problem a premature infant can have plagued Alyeesha. She had large, bilateral head-bleeds, she could not breathe on her own, she had stomach and feeding problems, and she was partially blind and deaf. But the clincher was that Alyeesha’s heart had a massive fungus infection for which she’d recently had open-heart surgery. They hadn’t closed her chest yet. All that stood
between me and Alyeesha’s beating fungal-ball heart were a few pieces of plastic, a clear flexible covering which looked suspiciously like Saran Wrap.

Her chances of survival, particularly healthy survival, were practically non-existent and she’d deteriorated further the past few days. She required increased oxygen, medicines to help her heart work, and medicines to help her urinate because if she became fluid overloaded it would put more pressure on her already weak heart. However, at 9 p.m., two hours into my shift, her heart rate, her blood pressure, and her blood oxygen levels dropped abruptly.

“Pam? Call Kristen,” I yelled across the Unit. Kristen was the NICU Fellow for the night. Alyeesha was getting sicker and doing it quickly. I needed the doctor. Kristen materialized at my side almost immediately.

“What’s going on?”

“Her blood pressure just dived to 40/28 and her heart rate is 90. Her O2’s are 100% now but I can’t get her sats above 85%,” I said.

“Where are we with the drips?”

“We’re maxed out on all of them. Can we do compressions with that open heart?”

“She’s got a limited code,” said Kristen.

“This might be it.”

“It might be.”

“Is she in pain? Should we give her morphine?”

Before Kristen could respond, Alyeesha’s heart rate dropped to 30 beats per minute, her oxygen level went to 50%, and her blood pressure went down to 32/22 mmHg. Because of her open chest, multiple medical issues, and a limited Do Not Resuscitate Order, her code was quick and she died shortly after 9 p.m.

Alyeesha was the lead domino in an avalanche. Six more babies followed her into death over the next ten days, all from complications of prematurity or birth problems. Alyeesha’s death was merciful, but there was no mercy for me, nor for the rest of the unit, as we tried to cope with so much mortality in an inconceivably short time period. I felt like the harbinger of death.

Children dying on me was not something I remembered learning about in nursing school. In fact, I don’t remember discussing it at all. Dying during the holidays was certainly not mentioned. But there I was in the NICU, trying to save babies born before their time, or born with problems that meant they couldn’t go home until they were fixed. I naively thought that as a nurse practitioner, I would have some insulation from this stress. That’s not the reason why I became a nurse practitioner, but I thought that by not being at a bedside for twelve hours a day it would not be as traumatic. How wrong I was.

Eight years after Alyeesha’s death, another one of my patients died around the holidays. Her name was Jessica, a 15-month-old girl, with a degenerative neuromuscular disorder that no one could accurately di-
agnose. We knew what she had, but we didn’t know what type it was or how she got it. I met her when she was hospitalized in late summer and she quickly became a familiar face as I saw her every day.

In addition to her neuromuscular disorder, she couldn’t breathe on her own, was rarely conscious, and couldn’t eat by mouth, though she was occasionally fed through a stomach tube. Most of her nutrition came through intravenous tubing inserted in her arm. As if that wasn’t enough, her kidneys began failing.

We were asked to start peritoneal dialysis, a type of dialysis done through the abdominal wall. In her situation, the hope was that dialysis would do the work of her kidneys to give them the rest they needed to resume working on their own, provided they were not permanently damaged.

We couldn’t put in a permanent dialysis catheter because of her other complications, so we made do with a temporary one, which we used for the next three months. After the first month of dialysis, she began leaking around the catheter and we were forced to slow dialysis to half-speed, which meant her situation wouldn’t improve fast enough. For three months, we tried to improve her kidney function, but it was like bailing the Titanic with a thimble. So much was wrong that she just couldn’t rally.

Despite not being able to pinpoint an exact diagnosis, and given her other medical issues, we knew enough to know that her illness was inevitably fatal. This knowledge gnawed at us. We didn’t want her to suffer yet we needed to respect the parents’ values of life and death.

Jessica’s family saw life in terms of alive or dead. It was irrelevant to them that she couldn’t breathe, couldn’t eat, couldn’t walk, and couldn’t pee on her own – nor would she. They wanted her alive and that was all that mattered. There was no middle ground. They made decisions to keep her alive at all costs, despite the knowledge she would not leave the hospital. Her care became emotionally charged.

We thought she was suffering and we were angry. We were angry at the doctors making the decisions. Some of that anger came at me since I made some of the decisions too. We were angry at the parents who kept agreeing to every suggested treatment, regardless how futile. We were angry at each other for feeling helpless.

Right after Thanksgiving, my pager woke me around eleven o’clock. One of Jessica’s doctors texted me to say that she had died without warning as her nurse put her into her father’s arms.

The next morning I went to the PICU to talk to the nursing staff. I swiped my ID into the unit, the cream and green halls leading me to her room. It was already occupied with a new patient. I had been in this room almost every day for three months. I turned towards the nursing station, slammed my papers, pen, and calculator on the counter.

“What the hell happened last night?”

“I don’t know,” said Debbie, Jessica’s primary nurse.

“She hadn’t been moved in three months and they move her now? Are you kidding?” I said.
“Dad wanted to hold her,” another nurse explained.
I was shocked. “They haven’t touched her in three months and now they hold her? Why now? What happened yesterday?”
“They agreed to the Do Not Resuscitate orders yesterday morning,” Debbie said. “Mom came in and lay down in her bed with her for most of the afternoon. I guess they wanted to hold her as best they could before anything happened, especially since they’d finally agreed to DNR.”
“When did that happen?” I asked.
“They did it after you Rounded yesterday,” Debbie said.
“Nice of someone to have told us.”
“I wasn’t here yesterday, remember? I’m just as pissed as you are. I’m her Primary. I’ve sat with that mother for three months and I wasn’t even here for her.”
Debbie had a right to be angry. I saw Jessica every day, but I saw her for an hour or so a day. Debbie took care of her for eight hours a day and had a good working relationship with Jessica’s mother.
“Well what happened?” I said.
“Her tracheostomy tube must have jiggled something — hit the carina maybe,” Debbie offered. “Amber got her moved into Dad’s arms and her heart rate immediately dropped. Because of the DNR, there wasn’t much we could do.”
“That sucks. All that work, all this time, and now this.”
“I know,” said Debbie.
“Where was Mom?”
“Not there. She was here all day, beside her, but I don’t know where she was when Jessica coded.”
“I wonder if they did that on purpose?”
“What do you mean?”
“They don’t hold her for three months, then sign DNR orders, and then this?”
Debbie stared at me. “Diane. Really. You’ve met the parents. You really think they could have put all that together?”
“It would take the life support decision out of their hands.”
“You’re over thinking it.”
“Maybe. But we’ve all seen many a baby hang in there until mommy and daddy can be around.”
“She needed to die.”
“She did need to die. I just didn’t think it was going to be like this.”
“At least she’s not suffering anymore,” another one of Jessica’s nurses said.
“True, she’s not. But still,” I said. Our distress wasn’t just moral distress at her suffering. It was emotional distress at her passing and at our inability to do more.
When I started nursing school, I had a part-time job as a research assistant for a nursing professor investigating nurse moral distress. At the time, because I had no nursing experience, I didn’t really grasp the breadth or meaning of the topic. Now, after my years in the NICU, as a practitioner,
and treating patients like Jessica, I was fully appreciative of nurse moral distress.

In medicine, we naively assume we control, guide, influence, and dictate our patients’ care and progress. The physician I’ve worked with for the last eight years is a wise and gentle man. He once told me that as Interns, if a patient gets better, we assume we did it. As a new doctor, when the patient gets better, we think maybe we had a hand in it. As a seasoned provider, we realize that most of the time it has nothing to do with us. A patient is going to do what the patient is going to do. We have tools, tricks, and technology, yet we control nothing.

Here lies the rub of care-giving. Our patients die. Our illusion of control cracks. We are opened up, bled, and told to come back tomorrow. Support to staff is minimal. Chaplains can come by, and sometimes there are de-briefing-type meetings after an event like Jessica’s passing, but consoling the staff, or even acknowledging their loss, isn’t on anyone’s list. We don’t get time off when a patient dies. We seek out the therapy dogs and some of their handlers are better with staff than anyone else could be.

“Who cares for the caregiver?” became a popular battle-cry in nursing for some years. Mental health days became de rigueur, recruitment and retention (R&R) committees were established on nursing units, and some of the more progressive hospitals gave discounts on massages and wellness programs. But times changed and economic difficulties caused everyone to scale back. Free time has given way to training and competency testing because we have to keep up with emerging technological advances and provide standardization of practice. “Who cares for the caregiver?” is still around, but it’s a whisper, not a shout.

“How do you do it?” people ask. I don’t know. I honestly don’t. But after twelve years under bright lights and amid the cacophony of hospital sounds, I spend my quiet time outdoors.

In my yard, I rake, dig, mulch, plant, reap, and sow. Year round, in the sweet promise of spring, the heat of summer, the cooling fall, and frigid winters, there’s always something to do in my garden that quiets my mind after the joys and traumas of the day.

Here I can pretend to be in control. I can choose the plants and location. I can choose to give it extra water or food. I can weed. I can prune. Like an Intern, I believe I am solely responsible for my garden’s bounty. But unlike the hospital, in the garden I am more forgiving of my failures. If a plant dies or the squirrels eat a bite out of every single tomato, it’s not the end of the world. Garden losses I accept with grace; patient losses not so much. As I struggle to find a balance, I forge on in both areas hoping that with enough perseverance I will find center.

One of my control projects has been compost. I love the idea of creating a nourishing soil out of rubbish. I bought a composter. I bought accelerant. I bought books. I read articles. I dutifully put in fruit and vegetable scraps, coffee grounds, and old leaves, but I had yet to see anything resembling dirt. It was either a slushy brown goo or there was strange
greenery sprouting out of old cantaloupe rinds. How hard could this be? Clearly my compost, like some of my patients, didn’t get the memo they were supposed to behave the way the book says.

One crisp fall Saturday morning, prior to Jessica’s death, I was in the hospital making rounds. I approached the bank of elevators and got on with Dr. Mitchell. Dr. Mitchell, a transplant surgeon, is the most amiable of the four transplant surgeons, but he does not indulge in idle chit-chat. He had recently removed a kidney from one of my patients whose body rejected the kidney and was back on dialysis. The families are prepared that this can happen with kidney transplants, but nonetheless, it’s a disappointing situation for all involved and we consider it a failure. In my nervousness about how he might feel concerning this case, I felt compelled to fill the silence and started complaining about my compost and somehow segued into raking up acorns in my yard.

Dr. Mitchell had a solution and was full of gardening hints and tips to share. Three short elevator stops later, he claimed I could throw those acorns into my composter. “Jump-starts the process. Acts like an accelerant,” he said. Then we reached the fifth floor and he got off.

I watched the elevator doors close. Who knew he was a gardener?

“Dr. Mitchell told me to put acorns in my composter,” I said to the opening elevator doors. My friend Debbie, the PICU nurse taking care of Jessica, was on the other side waiting to get on.

“He speaks?”

“Loquaciously.”

“Why on earth were you talking about compost, and when does he have time to do this?”

“He took out Eric’s kidney the other day.”

“That’s your transplant kid who rejected it, right? Is he back on dialysis?”

“Yeah, he is. The family is so sad. Anyway, I couldn’t stand there without talking. So I just babbled on about the acorns.”

“Babbled? Now there’s something you don’t do.”

I laughed sheepishly. I can babble nervously with the best of them.

That afternoon after work, I grabbed the rake and made acorn piles in the backyard. Not knowing what the acorn to compost ratio should be, I filled half the composter with acorns. I couldn’t save Jessica. I couldn’t save Eric’s kidney. I couldn’t save Ayleesha. But damnit, I was going to make dirt.
About the Contributors

Aaron Sommers’ fiction has been published in Confluence: The Graduate Journal of Liberal Studies. His short story “The Million Dollar Sneeze” was selected by the 2011 Vermillion Literary Project Magazine. He earned an MA from the University of New Hampshire and an M.Ed. in special education. He lives in NH with his wife and daughter, in a house set deep in the woods and on the more inaccessible side of a mountain, where he is toiling on his first novel. He can be reached at adsommers@hotmail.com.

Ann Perbohner was born in Chicago, IL, and raised in nearby Highland Park. She has a BA in Natural Sciences from Shimer College, and an MLIS from the University of Pittsburgh. Her poetry has appeared in Cram 9, Bloodroot (pending), The Lyrical Librarian and The Hellenic Voice. Working as a Physical Sciences Librarian at Dartmouth College, she has lived in the Upper Valley region of Vermont and New Hampshire since 2005.

Brian Guercio graduated from Dartmouth Medical School in 2011. He is a resident in the Emergency Medicine program at Boston Medical Center.

Carole Spearin McCauley is a medical writer, editor, and novelist, the author of much short work and 12 books from publishers large (Simon & Schuster, Dutton, Pocket Books, Bantam) and smaller. Her mystery series, beginning with Cold Steal and A Winning Death, appears from Hilliard & Harris (Maryland). Her short work (poetry, stories, articles, reviews, interviews) has appeared in nearly 200 print periodicals and anthologies, including New York Times, Family Circle, North American Review, The Sun, Redbook, National Catholic Reporter, Lesbian Short Fiction, Women:Omen, Women of Mystery, cantaraville.com (online). Seven pieces and a photo have won prizes in contests, including two poems in international competitions sponsored by USA Today and Radio Netherlands Worldwide. She earned an MA in writing from Manhattanville College, Purchase, NY. For five years she worked as associate editor of Panache (NY; Princeton), judging annual fiction contests. She lives in Hanover, NH, where she teaches writing in Dartmouth’s adult ed program. She began medical writing at National Institutes of Health, Bethesda, MD.

Ceretha McKenzie earned her MA from the University of California, Santa Barbara, (UCSB) specializing in satellite image processing. She designed and taught classes in image processing at UCSB, and has worked on research projects for NASA and CRREL. She has also studied dance and other movement arts, and expressive arts therapy. She is currently working on various photography and design projects, which can be viewed on her website: http://ceretha.net

Charlene Kwon is a writer, book artist, and teacher. Her collection of short stories A Lexicon for Loneliness can be found online as a .pdf or e-book file.
Please write her at charlene.kwon@gmail.com for inquiries.

**Clare Wilmot** is a 57-year-old retired surgeon. She was recently ill with leukemia and has undergone three bone marrow transplants at DHMC. Married with three adult children.

**David W. Ricker** is currently the Associate Director of Data Warehousing and Business Intelligence at Dartmouth College in Hanover, NH and a member of the Information Technology Council for Western Governors University based in Salt Lake City, UT. The father of a child with Trisomy 13, aka Patau Syndrome, Dave's reflections on the experience of caring for this child as well as his frequent interactions with the medical establishment formed the basis for his role in helping create the framework for the “From the other side of the Stethoscope (FOSS)” program at the Dartmouth Medical School. He is also a frequent contributor to the program as a member of the Family Faculty. Dave lives with his wife Melinda and four children on a small sheep farm in Orford, NH.

**Diane Kraynak**, CPNP, CNN, began her nursing career as a newborn intensive care nurse. For almost a decade, she has been a pediatric nephrology nurse practitioner. She now works in nephrology at Children's Mercy Hospital in Kansas City, where her current primary focus is pediatric dialysis and transplant.

**Emily Robbins Bradley** is a MFA candidate in Creative Nonfiction at the University of New Hampshire. She graduated from Brown University in 2006 with a degree in Community Health and has since focused her writing around personal experiences. She has published essays in journals such as *The Northern New England Review* and anthologies such as *Voices of Breast Cancer*. Although she knew that not every family categorized amphibians, she was shocked that people asked her what a peeper was after writing this essay.

**Jeffrey Cohen** is a neurologist but very often he wishes he could pursue his creative interests full time.

**Jeffrey K. Weiss** is a tapestry artist-weaver based in Grafton, NH. His tapestries have been featured in shows on both the East and West Coasts.

**Jim Washington** lives in Hanover, NH and still hasn’t found a way to pay his bills through poetry alone. “Séance” is dedicated in memorial to his grandmother, Esther, and mother, Delores, each felled by Alzheimer's. Jim remains diminished from each loss. jmwashington5@comcast.net

**John H. Lyons** is a retired surgeon from Dartmouth Hitchcock who is presently a professor of Anatomy at DMS. He has been an avid amateur photographer for over 50 years.

**Joyce Griffen** was born in Boulder, CO in 1926, and started first grade there. After school years on the Western Slope she returned to Boulder in 1943 and,
after many eventful years, obtained her BA in 1958. MA and Ph.D. degrees from the University of Pennsylvania followed, and in 1965 she begun her teaching career. She taught for a short time at Webster College (now University) but more importantly, for almost twenty years at Northern Arizona University in Flagstaff, AZ.

She and her husband Bill, also an anthropologist, are founding members of Kendal at Hanover. She has published articles on Womens Studies and contemporary Navajos, and edited *Lucky the Navajo Singer*.

**Kyle Swingle** returned to the College on the Hill following a four-year foray into a world of airline miles and dissatisfaction. Since beginning medical school, some friends of the author have become enemies and some enemies have become friends, but all have contributed inspiration. In his spare time, Kyle enjoys reenacting scenes from 1980s films and railing against things he believes to be over-rated. He wholeheartedly agrees that goats are fools.

**Lys Weiss** is a woman of letters and a breast cancer survivor, based in Grafton, NH.

**Nicola Quatrano** grew up in Somers, a small farm town in North Central Connecticut, surrounded by her large, loving, and LOUD Italian and Irish families. She graduated from Boston College where she studied Biochemistry and Studio Art. Although academically married to the sciences, her love affair with art has been enduring. As an oil painter, she loves using her hands; stepping away from textbooks and into the studio to create. She is currently in her 3rd year at Dartmouth Medical School.

**Patricia McGuinn** grew up in Chicago and moved to New Hampshire in 1997. She has a BA in English from Northern Illinois University. She has been a Waitress, Respiratory Therapist, Chef, Technical Writer, Restaurant/Inn Owner, Medical Secretary, Administrative Assistant, Sheep Farmer and an Elderly Care Provider. She has completed one novel and is working on her second while rewriting the first. She is also the Department Administrator for the French and Italian departments at Dartmouth.

**Rezwan Ahmed** is a fourth year medical student who claims the Bluegrass as his home state. He graduated as a Public Service Scholar from the University of North Carolina at Chapel Hill in 2007 with majors in Psychology and Biology and is currently studying at Marshall University. Rezwan aspires to be a “renaissance” physician, helping indigent populations while integrating his interests in education, business, and the arts into his daily practice. In his spare time, Rezwan enjoys marathon running, thought-provoking novels, and culinary adventures. Having traveled to 44 countries and 49 states within America, he is always searching for novelty in his surroundings and inspiration for writing.

**Valerie Graham** (DMS ’62, Harvard MD ’65) is retired from family practice and UVM medical school. She lives in Charlotte, VT.
Valerie Pinto is a recent transplant to New Hampshire. Born and raised in Connecticut she moved to picturesque Grafton three years ago. Valerie is a Recreation Specialist at Kendal at Hanover where she is able to share her love of art with the residents in the Health Center, some of which suffer from dementia.

Valerie has spent over 15 years developing and implementing art programs for all stages of Alzheimer’s as a therapeutic recreation director. She spoke at the 2000 Alzheimer’s Association Conference in Washington, DC on the beneficial effects of massage on end stage. She received the Alzheimer’s Association of Connecticut’s “Caregiver of the Year” award in 2007.

Valerie and her sister care for their mom who is suffering from early onset Alzheimer’s. She is now in her 24th year at home and is unable to care for herself in any way.

Valerie wrote a chapter for the book *Martial Artists Teachers on Teaching* describing the self defense and rape prevention classes she taught and the effect they had on survivors. She serves as vice president of the Cardigan Mountain Art Association, a non-profit group working to educate and inspire the local community. Most recently, she started a small family business Ewenique Vallee Creations featuring fiber related greeting cards and gifts, which can be viewed at www.eweniquecreations.com.
We would like to thank Dean Chip Souba, the DMS Alumni Council, and DMS Student Government for generous financial contributions to this issue. We would like to thank James B. Rosenthal for his publishing expertise and guidance in producing this revitalized issue of *Lifelines*. Thank you to Shawn for your support, encouragement, and advice.

We wish to thank all of you who have shared your stories with us.
Support Lifelines

*Lifelines* is a medical student-run journal, featuring the art and writing of the Upper Valley and the world beyond. This journal means a lot to the students that produce it, to those who are able to express themselves through it, and to those who are touched by what they see within its pages.

This year represents a particularly important year for our journal. In tough economic times, it has been especially challenging for us to continue to find support for the publication of *Lifelines*. We have been unable to publish the journal since 2008 and this issue was only made possible by generous donations and support from individuals in the community and our Student Government. It has been a long time coming, but we are proud to be able to bring you *Lifelines* once again.

In the interim, we have heard from the community that has come to expect to find *Lifelines* in patients’ rooms, doctors’ offices, hospital waiting areas, classrooms, office desks, and home coffee-tables, just how much this journal was missed. We hope to continue to publish and distribute *Lifelines* consistently in the future, to provide our contributors an outlet for their creativity, and to provide our community with nourishment for the spirit.

Your donation or contribution can help us to make this a reality. One hundred percent of the funding for this journal goes into printing costs and administrative expenses. We appreciate donations of any amount.

To send donations, or for more information, please contact us at:

The Geisel School of Medicine at Dartmouth  
Attn: Lifelines Fund  
Hanover, NH 03755-3833  
or  
lifelines@dartmouth.edu