

CHAPTER TWENTY

Neil Rivers

As the Volvo's tires crunch onto the gravel drive, Terry speaks, his voice at red alert. "We are so screwed."

I peek out. Neil River's pickup, a forest green 1955 Chevy Stepside, is parked next to the shop. The shop door is open.

Terry pulls into the carport that connects the shop to the house. We slide out of the car and ease the doors closed. We begin to tiptoe across the gravel.

"Been out sightseeing, boys?"

I freeze, startled at the sound of Neil River's voice. Terry turn towards his father, his face a picture of innocence. "Oh, hi dad."

"So, what kind of dumb-ass stunt have you been up to, boy?" The look on Neil Rivers as he stares at Terry blows up any hope of an excuse. A balding bear in a faded Aloha shirt, a thick

grey beard, and glasses with bright red rims, Terry's father looks a bit like Santa on vacation. As he stands at the shop door with arms folded, waiting for the truth, Santa is pissed off.

"It's a long story, dad." Terry sighs.

"I've got all the time in the world." We stand like startled deer as Neil Rivers walks around the two vehicles, talking as he approaches. "Maybe, you could start by explaining why the police came by today asking if I'd seen your buddy, over there." He stops a few feet from Terry and gestures towards me with his head. This is the first time he has acknowledged my presence.

"The police?" asks Terry. I can almost believe his look of surprise.

"Two squad cars. They seemed a bit agitated. I don't know what the hell kind of trouble you two are getting into, but you'd better start explaining, and you'd better not leave anything out."

Terry's father leads us into the kitchen. We sit in silence on either side of the large cherry table as he fills a kettle and puts it on the stove to boil. He sits down at the head of the table. "OK boys, let's hear it."

So, once again, I recount my day. I hesitate before telling about the chase through the hospital and my escape from the police down the maple tree, but Terry has told me stories of his

father's run-ins with the law during his days as a campus radical in the 70's, so I hope he might understand my decision to defy the police.

But I don't think Santa is in an understanding mood. As he brews himself a pot of coffee, at least he seems to be listening. I keep talking. I am even a bit relieved to be telling my story to an adult.

Once I explain how I came to Terry for help, Terry takes over and tells the story of the map and his decision to take the car. I listen and watch for any sign of what his dad is thinking.

As Terry finishes, Neil Rivers stares at us in silence, allowing our words to settle. He focuses on Terry. "So, are you thinking I might be a bit upset about all this?"

"I'm sorry, dad. We ..."

"What is it you thought would really bother me, the fact that you're harboring a fugitive from a police investigation in my house or the fact that you took my car without permission and drove it around Seattle including a parade in front of half the police force with no damn license?"

"Both," Terry stares at the table. "Look, Dad...."

"Save your explanations." Terry's father glances at me, then turns back to Terry. "You don't even know what I'm really angry about." He turns back to me, his eyes blazing.

I squirm in my seat and wait for the bomb to drop.

"Let's start with that quarantine. What exactly do you think a quarantine is for?" My brain turns to Jell-O. The truth is that I haven't really thought about what it meant until right now. But I don't feel sick at all. There's no way I'm putting people at risk. "To isolate people who might get sick?"

"Isolate them from whom?"

"Ah ... other people."

"Healthy people?"

"Right." I know where he's going. And I know he's right.

"Like me? Or your best friend over there?" He gestures towards Terry.

I hesitate. "Right." Boy did I screw up.

"So the quarantine is to protect public health?"

"Right. That too."

"No. That one. It's all about protecting the public. You can start spreading a disease before you have any symptoms. Right now, you might be passing it on to me and Terry."

"I'm sorry, sir. Right now, we don't think it can spread from person-to-person."

"You don't think? I'm sorry, I missed the part where you went to medical school. Whatever you've come up with, you don't know for sure. And you certainly didn't know it wasn't communicable when you came to my house."

"I'm sor..."

"You have no right to put my family at risk."

I said nothing. What was I thinking?

"And if that weren't enough, you sneak into the hospital, violate their quarantine, and get a sample of the deadly virus. Then, to top it all off, you give the sample to Athena and ask her to analyze it. Did I miss anything?"

"No."

"And she has it in the lab?"

"I think so."

"Has she done anything with it?"

"I'm not sure," said I. "I haven't had a chance to talk to her."

"And you think she is going to analyze this and find something that the CDC, with state-of-the-art research facilities, teams of world class scientists, and all the gold in the US Treasury at its disposal can't find?"

"My father is certain that the CDC is on the wrong track. He had figured out something that is critical to making a vaccine."

"And you are sure you're on the right track?"

"Not yet, but my father's notes will get us there. I'm sure."

Neil Rivers shakes his head. "Get a grip, boy. Your dad's a smart man. He might even have figured this out. But don't assume you can do it too. Goin' to some fancy high school does not make you Louis Goddamn Pasteur."

"I just wanted to help my dad."

"I appreciate that, but do you have any idea what you're dealing with? Do you know how dangerous this stuff is?"

"I saw my father in the hospital, I know what it can do."

"Have you heard today's news? Do you even know what's happening?"

"We know about the encephalitis. We know a lot of people are in the hospital."

"Jack. Twenty eight people died in the last 24 hours."

I can't believe what I am hearing. Neil Rivers continues.

"Look, if you want to flout the law, be my guest. Those guys are not always on the side of the angels and they don't always get the story right."

Neil Rivers fixes a withering stare on me. "But this is just irresponsible. Hell. It's stupid. You have put your friend Athena and everyone in her mother's lab at serious risk, not to mention yourself and, probably, Terry and me as well."

I am no longer listening. Twenty-eight deaths. The news hits me like an avalanche. I am tumbling in cold white snow, searching for the light.

I stop in icy darkness.

"I'm very sorry about your dad, I. I really am." Neil Rivers sits down across from us, his massive hands wrapped around a mug

of coffee. "I am hoping as hard as I can hope that he pulls through all this. If I were a prayin' man, I'd pray for him." He takes a long sip of the hot black coffee. "You know that if we can do anything to help, we will."

He takes another sip, staring at me as he does. "But Jack, you have got yourself way out on a limb here and, what's worse, you have dragged a bunch of other people out there with you, including some people who didn't volunteer and aren't getting hazard pay. I think I understand why you did what you did, but you need to give some serious thought to getting out of the tree.'

'I'll give you the rest of the day to figure this one out. I'm not going to tell you what to do and I'm not about to turn you in to the cops, but I'm done with this. I have some work to do. You can talk it over with Terry, but when I wake up tomorrow morning you need to be somewhere else." With that, Neil Rivers rises and heads for his shop. He stops at the door and turns to look at Terry. "Oh, and you, young man, are grounded." He pauses.

"Forever."

CHAPTER TWENTY-ONE

SARS

Athena rides back to the lab that afternoon through a city hollowed by fear. The deaths have all but shut down Seattle, closing schools and businesses and draining traffic from the streets, especially around the University. In addition, tens of thousands fled the city after a story hit the Internet suggesting that the CDC might soon be placing all of Seattle under quarantine with tight controls on who could enter or leave. Most of those who remain are hunkered down in their homes, venturing out only for essentials.

As Athena locks her bike, she scans the almost empty parking lot. She recognizes most of the cars huddled around the building entrance including Jim's well-loved, electric-blue Mustang convertible, Alexi's pristine, black Volkswagen Jetta, and Zhao's Suzuki Ninja motorcycle. A half dozen aging economy cars,

which belonged to the underpaid laboratory regulars fill up the remainder of the front row.

Next to the front door, in one of the disabled parking spots, a hulking late model black SUV with darkened windows sticks out like a linebacker at a munchkin convention.

Inside the lab, an eerie quiet has replaced the buzz of graduate students and medical students, who usually descend on it each weekday afternoon. Only the hardcore of the laboratory staff remain. Their experiments represent years of work and they are not about to abandon them.

Athena walks down the corridor that runs along one side of the main laboratory. Through the wall of windows, Athena can see Zhao rummaging through the freezer in the far corner of the lab.

On the other side, hushed voices vibrate the glass wall of the conference room. Inside, Alexi is sitting opposite a square-jawed man with predatory features who leans across the table towards him, a raptor preparing to strike.

Seated next to the hawk-like man, a large African-American with a shaved head and a muscular frame appears to be taking notes. A wire curls down from the note taker's ear and crawls into his collar. She can't help notice that Alexi looks uncharacteristically nervous as he listens.

Athena hurries down the hall to a small room just off the main laboratory. A long, lazy finger of light reaches through a

high window and stretches along the wall. She walks to the bench that holds the electrophoresis chamber that she used to separate the fragments of DNA from the virus. Someone has already pulled out the samples she put in there the night before. A note in Alexi's bold, insistent print reads, "DO NOT LEAVE SAMPLE OVER TWELVE HOURS!"

Athena brings the gels over to the light table and lays them out, side by side. Each of the gels is now marked by a series of dark bands of varying width. Each stripe contains a particular fragment of the DNA derived from the virus. She feels her heart quicken as she sits down and stares into the fingerprints of the killer.

"Yo, yo! The goddess of wisdom is in the house." Startled, Athena spins around to see Jim standing in the doorway of the small room, a big smile on his face. He wears a purple, UW tee shirt with an intent looking Husky on it. Above it are scrawled the words, Lead Dawg.

"Ah, hey, Jim." Athena does not want to be rude. She likes Jim, but he is the king of chat and Athena doesn't have time for it today.

Jim peers over her shoulder. "Hey, whatta ya got?"

"Nothing. Just a school project." Athena turns towards him, blocking his view with her head, and changes the subject. "Who are those guys talking to Alexi?"

Jim hooks a hand around each side of the steel doorframe, leans back, and peers down the hallway as if making sure no one is listening. He looked back at Athena and shrugged. "Don't know. They look like the damned CIA. Maybe they finally figured out that Alexi's been spyin' for the Russki's all this time. I always figured he is a spook."

"And what do you figure he's been spyin' on." She is anxious to steer him away from the gels.

"Tryin' to steal my research. Top secret stuff."

"Of course." Athena smiles weakly at him. "I'd better get back to work. ... My mom wants this done by like yesterday."

"Sure. Sorry. No, problem." Athena has just turned back to look at the gels when Jim speaks again. "Hey, did you hear they identified the virus?"

Athena spins back, ears on. "What? What is it?"

"It's a corona variant."

"A coronavirus?"

"Right. Like the one that caused SARS"

"Severe Acute Respiratory Syndrome?"

"Right again."

"Not good. China, 2003, right?"

"That's the one."

"Spread to southeast Asia, Canada, and the US. Killed a couple hundred people?"

"Seven hundred seventy-five to be precise."

"So, what's it doing in Seattle?"

"That's the gazillion dollar question. That and why is it associated with an encephalitis? That never happened before. This thing is ..." Jim's eyes turn to look down the corridor and his voice trails off. Footsteps on the carpet. Jim pivots to face whoever is approaching.

"Excuse me, are you James Donatello?" The deep resonant words startle Athena. The bald man who was sitting in on the questioning of Alexi appears next to Jim. Athena has always thought of Jim as a big man, but this guy towers over him. He pulls out a badge and flashes it at Jim. "I'm agent Cloverdale of the FBI. Would you mind answering a few questions?" A faded southern accent laces his words, giving them a coating of gentility. But this is not a question. It is a command.

Jim's jovial nature vanishes. "Am I in trouble, sir?"

"Just routine questions. We're talking to all the microbiology labs in the city. Come this way." Cloverdale turns and walks down the hall toward the conference room. After giving Athena an I've-got-no-idea-what-this-is-about shrug, the Lead Dawg turns and follows.

Athena works fast. She doesn't have an official position at the lab, so they probably won't interview her.

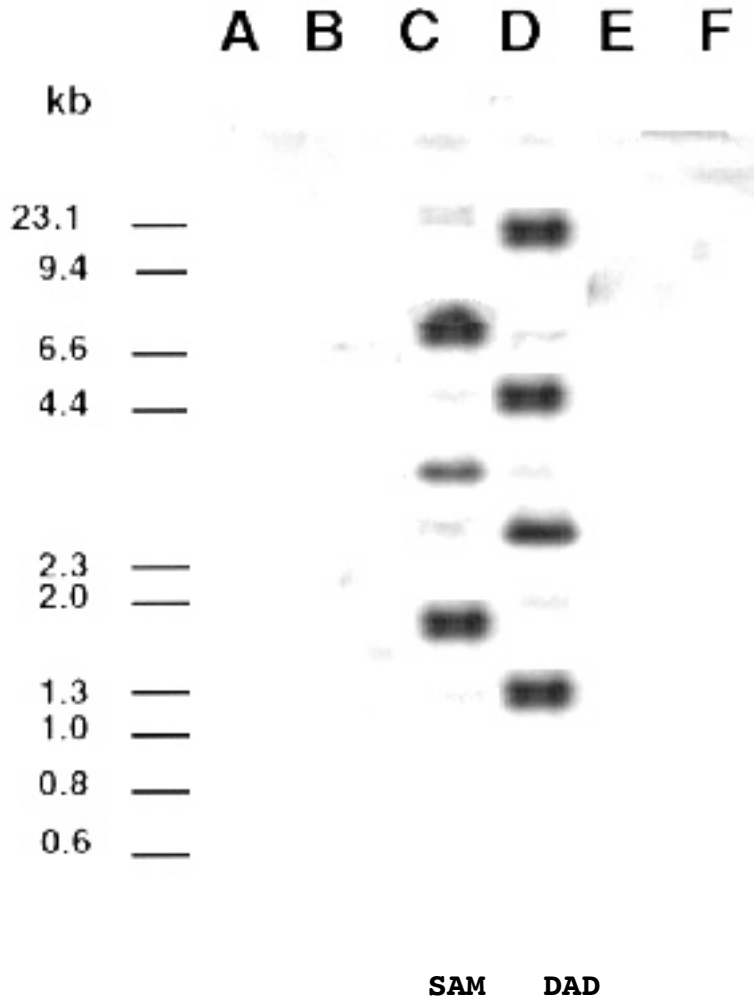
But she can't be sure.

She makes digital images of the gels from her Southern blot. Then, she goes on the web to find a blot from a sample of the SARS virus and compare it to the image from Jack's father. There are some small differences between the gels, slight differences in the location of the dark black bands marking the fragments of DNA.

These slight differences mark the genes that have made the virus even more deadly than SARS.

This is bad news. Corona viruses are as old as time, SARS was brutal. And no one has come up with a cure and no one is likely to do so any time soon. And there is no vaccine.

Next, Athena compares the blot from Jack's father to his brother. Her heart sinks.



None of the dark bands line up. The virus that has infected Sam appears to have nothing in common with the one causing the outbreak.

If Charles Boston expected the viruses to be the same, or even similar, he was wrong.

She has to call Jack. He has to know what she has found before he gets any deeper into this.

Athena picks up the phone and calls Jack's house. A series of clicks. The call is being rerouted. Then voicemail. "This is the

Seattle Department of Public Health. The residents of this household are currently unavailable. Please be advised that this household is under federal quarantine and cannot accept visitors at this time. If you have questions, please call the Seattle DPH at 206 336-5500."

"Wow." Athena sets the phone down. Aren't Abe and Sam supposed to be in the house? Where are they? Jack, she knew, could only be in one place.

Athena hangs up and dials Terry's cell phone. That would be the first place Jack would go in a storm. Terry answers and hands Jack the phone.

"Hey, Athena. Did you look? What did you find?"

The sound of his voice, the sudden optimism, makes her hesitate. The news she is about to give Jack is not what he hopes to hear.

"Jack. Your dad has a variant of the SARS virus."

"What's that?"

"It stands for severe acute respiratory syndrome. It's a virus that first appeared in 2002."

"What can we do for him?"

"No vaccine. No treatment. Which is not good news if we are counting on EVAP."

"What are our chances?"

"To be honest, not good." Athena does not want to be honest.

"Sorry, Jack."

"Does that mean no chance?"

"That means slim chance."

"I guess I'd better go with slim chance." Jack took a deep breath. "How about my brother's sample. Did you look at it?"

"Whatever Sam had is definitely not SARS. If it is, he wouldn't be waltzing around at home."

"Athena, I don't think my father expected them to be the same. He just wanted to compare them. He knew the symptoms were completely different."

"So what did he expect to see?"

"I don't know, but look again. There has to be something there."

"I'm not sure how far we should keep pressing this."

"You've done the hard part, right? Once you extract the DNA, the dangerous part is over. What have you got to worry about?"

"What I've got to worry about is the fact that the FBI is questioning the staff here at my mother's lab. I don't know what they're asking, but I ..."

Athena stops short. In the hall. Just outside the door. Is that a shadow? Is someone there? Standing. Listening.

"The FBI? What does the FBI want?" Jack's question startles her and she turns away from the hall for a moment. "Shhh," she whispers. Athena turns back toward the door.

The shadow is moving.

"Athena, what's going on?"

Athena cut him off with an angry whisper. "I don't know. I have to go." She hangs up before Jack can respond, sets down the receiver, and rushes to the door.

Out in the hallway, the shadow and its owner have vanished.

CHAPTER TWENTY-TWO

Hardacre

No one in the storage room, the utility closet or the equipment rooms. The FBI agents are in with Jim. Other than Zhao, who is in his office, and Alexi, who is back at work on the electron microscope, there is no one else in the lab. Maybe, whoever is listening has left the lab. Or maybe, it is her imagination.

Either way, Athena needs to work fast. Listening hard for any approaching footsteps, she pulls up the image of the gels from Jack's father and brother. She maneuvers the windows so that the two are side by side. The dark bands of DNA in the two gels are in completely different locations. Why would the presence of a completely different virus in Sam reveal anything about the virus in Charles Boston's lungs?

Then she sees it. It's subtle. She missed it completely at first.

In a brilliant leap of scientific imagination, Charles Boston somehow understood what was happening. Now, she can see it too. After a long day of hard, meticulous work in the lab, she has the evidence that Charles Boston predicted in a single moment of clear-eyed intuition.

She pulls out her phone and is about to dial Jack when a voice at the door interrupts her.

"Excuse me, Ms. Margolis?" Agent Cloverdale ducks his head through the doorway. "Have you got a moment?"

Athena pockets her phone. "Sure." She has to reach Jack.

"Just a few routine questions." Cloverdale steps back from the door. "Would you mind following me to the conference room? It will just take a couple of minutes."

His words do not reassure her. There is nothing "routine" about questions from the FBI.

Jack will have to wait.

Athena follows Cloverdale to the conference room. As she enters, the hawk-faced man whom she had seen questioning Alexi raises his eyes from the small notepad in his hand and smiles a tight-lipped smile. He reaches into his pocket, pulls out a small handful of something and throws it into his mouth. He chews slowly, observing Athena with penetrating eyes. A severe grey buzz cut tops a face of bone and muscle.

He gestures towards the chair across from him. "Have a seat," he says, finishing his mouthful. As he chews, Athena can see the muscles and tendons of his face working his jaw.

Athena pulls out the chair and sits, back straight, hands in her lap and waits. In her entire life, she has never even been to the principal's office. Now she is facing off against the FBI.

And she has something to hide.

"Ms. Margolis?" He slips the notepad into his coat pocket.

"Yes?" The word comes as a question, betraying her anxiety.

The man leans back in his chair. "I'm Special Agent Hardacre with the FBI. Do you mind if I call you Athena?"

"Sure, no problem." Athena refolds her hands and glances around the room.

"We are not investigating you. We are simply checking in with all the infectious disease labs in the city. This is just a routine part of our investigation of the outbreak." The rasp in his voice and the wear on his face told tales of a rough and tumble life.

Hardacre taps a finger on a small digital tape recorder in the middle of the table. "So you understand, we are recording this conversation. Strictly a formality." He seems distracted, maybe even a bit bored. "Just relax."

"OK" Athena has not relaxed a molecule.

"Athena, have you noticed any unusual activity in the lab over the past month or two?" He reaches into his pocket and pulls out another handful of whatever it is he is eating. Athena can't quite make out what they are, some sort of small multi-colored candy.

"Well... No. I haven't seen anything remarkable. Not really."

"Anyone coming in late at night? Using unusual levels of precaution in dealing with samples?"

Athena shakes her head. "Around here, everyone comes in late at night. But nothing unusual. No."

"No one suddenly changing their schedule and coming in at strange hours." He finishes the handful of candy, watching her. Athena looks down at the table to avoid Hardacre's gaze.

"Not that I noticed."

"How about abnormal levels of caution, procedures that one might use when working with a dangerous pathogen?"

"No. Not that I can recall." Athena struggles to keep her face from flushing. Did he know? Had Alexi or Jim said something to him? How would they have answered Hardacre's questions about seeing anything unusual?

Hardacre paused for a moment, his lips pursed, his head bobbing slightly as if he is thinking. For Athena, the silences were harder than the questions.

"What do you know about Dr. Markov's background?"

"Not much. He keeps to himself."

"Have you heard anything about what he did in Russia before coming to the States?"

"Not, really."

"Anything to suggest he might have any experience with biological weapons?"

"Well, just rumors. Just stuff people say because they don't know."

"He never talked about his time in Novosibirsk?"

"No. He doesn't talk much."

"Did you know one of the Soviet's biggest biological weapons labs is there?"

"I had heard it is in Siberia." Athena did not believe anyone in her mother's lab could be involved. Even Alexi.

Hardacre reaches into his pocket again. He is about to pull his hand out when he looks at Athena. As if he had just thought of the idea, he pulls out a crumpled paper bag and holds it out towards her. "Candied sunflower seeds." He shakes the bag so they rattle inside. "Addicting little things. Coated in chocolate and candy. Like to try some?"

"No." Athena shakes her head. "Thank you."

Hardacre smiles, raises his eyebrows, and shakes the bag again. "Sure?"

"Yeah, but thanks."

"My little vice. Hope you don't mind." He takes a handful, shakes them once in a closed hand and tossed them into his mouth.

"Athena." Hardacre pauses, chews and swallows. "Have you heard from your friend Jack Boston recently?" The words fly across the table like a fistful of gravel.

Where did that come from? Her face flushes and her voice catches as she answers. "I ... I haven't seen him since they shut down school. I talked to him just after his father got sick, but I don't even know where Jack is."

"That is the last time you talked to him?"

Athena struggles against her instinct to tell the truth. "Right," she says. The realization she is committing a federal crime by lying to the FBI nearly chokes her.

"Are you aware that your friend impersonated a doctor, paid an illegal visit to the hospital and fled from authorities?"

"He did?" She tries to register surprise but feels herself falling into a web of her own deceit. "Ah, no. I had no idea."

"Do you have any idea why he might have gone to such lengths to get to his father?"

"I assume he just wanted to see him."

"You can't think of anything else he might have been doing in the hospital?"

"I don't know. As I said, I haven't talked to him."

"We would very much like to speak with your friend, Athena. If you do speak to him, could you encourage him to come talk to us?"

"Of course."

"And please let us know if you hear or see anything unusual in the lab."

"Of course. Of course."

"Athena, I'm sure this is very hard for you. You are not in trouble. We are asking these questions at labs all over the northwest. Any lab that works with viruses."

Hardacre pauses, takes another handful of sunflower seeds, feeds a few into his mouth and takes out his notepad. Cloverdale, who had been busily taking notes at the end of the table, stops writing and looks up.

Finally, Hardacre speaks. "Just one more thing. Have you ever worked with the SARS virus?"

"What?" Her astonishment is genuine. Did they know? How could they possibly know?

"The SARS virus. We know you spend a lot of time in the lab. We know your mother has worked with the SARS virus. Have you?"

"That would require a level 4 lab. I have never worked in a level 4 lab."

"So you've never handled the SARS virus in a lab?"

"Right." Once again, falsehood leaves a foul taste in her mouth.

"OK. That's all for now. Please let us know if you see anything unusual. Here's my card in case you need to reach me." Hardacre, pushes a business card across the table to her, rises and extends his hand. "Thank you so much for your time."

Hardacre takes another handful of sunflower seeds, and then pushes the bag towards her. "Sure you don't want some?"

Athena stands and smiles. "No, thank you."

"Your loss." Then, as she enters the hall, he calls to her. "Please let us know if you hear from your friend, Mr. Boston. He really should be in quarantine and should be close to medical care in case he develops the disease." He pauses. "And, if you don't tell us, you will be committing a felony, because there is a warrant out for his arrest."

"Of course." Athena leaves, trying not to reveal how glad she is to get out of that room. Her hands, she realizes, are clammy with sweat.

It is time to cover her tracks.

She walks briskly back to the room that holds the gels. Careful to make sure no one can see her, she dumps the gels from Jack's father and brother into the biohazard bins. Then, she goes to her computer and erases any trace of the images.

Suddenly, calling Jack doesn't seem like such a good idea.

Outside the lab, Agents Hardacre and Cloverdale walk to the car. It is clear who is in charge even though Hardacre only comes to Cloverdale's shoulder. They climb into the SUV with Hardacre at the wheel.

Hardacre looks over at Cloverdale. "So what did you think, Jim?"

"Seems like she's not telling us everything," Cloverdale responds.

Hardacre twists to look out the rear window and backs out of the parking slot. "Little Miss Einstein is lying through her teeth."

"Should we get a search warrant for the lab?"

Hardacre finishes backing out and turns to look at his partner. "Not yet. I don't think she's a threat and searching a federally funded infectious disease lab will be tricky. We'll need some help to do it."

"I have no idea how or why she would be connected to all this, but I want a tap on every phone call, every email, every text message she sends."

Hardacre shifts gears, turns to face forward and heads out of the lot. "I also think we need to track down her friend, Boston. I'm not sure why he is running from the cops, but every cougar knows: when a doe runs, look for a fawn in the bushes."

CHAPTER TWENTY-THREE

Water

I sit on one of the long benches that flank the thick wooden table in Terry's kitchen, head in hands, staring at the swirling grain of the cherry wood. Terry sets a mug of hot coffee and a pitcher of cream under my nose. "If you're as tired as I am, you'll need this."

"Thanks, T." I am not particularly interested in coffee. My nerves are jangling enough already, but it feels good to have a friend put something warm in front of me. "I'm not sure where we go from here." I pick up the pitcher and tilt it slowly over my cup until a single drop of cream hits the dark brown liquid and spreads in an expanding circle across the surface.

"Hey, sorry about my dad throwing you out, but don't worry, we'll find a place for you to stay. You can always use the

hideaway." Terry sets his cup down and sits across from me. "No one will find you. I'll get you food and water. You can stay there for days if you—"

"I'm not worried about where to stay. I'm wondering if there is any way I can still help my father."

"The only thing in his notes that made any sense is the line about comparing samples. Athena tells me there is no relationship between the two samples."

"That means the whole mess in the hospital was a waste of time. We've got nothing to show for it."

"And she tells me this is some sort of SARS virus and no one has ever developed a SARS vaccine."

"OK, so this thing is not a slam dunk." Terry shrugs. "We both know you're not giving up."

I smile. "Yeah. I just wish I had more to go on."

"We'll find something, chief."

I stare into my coffee, letting another drop of cream fall into the cup. As I watch the second drop spread across the coffee, it hits me.

I look up at Terry. "Maybe we just did."

Terry stares at me. "Just did what?"

"Find something."

Terry sits down next to me and throws an arm around my shoulder. "It looks like what you just found is your coffee cup."

"No, I'm serious."

"Me too."

I pick up the cream pitcher and position it over Terry's cup of black coffee. "Watch this."

Terry gives me this are-you-crazy look. Then, realizing I'm serious, he leans forward so he can see into the cup. "OK. Eyes on."

I let a single drop of cream fall into his coffee.

"What do you see?"

Terry peers into the cup. "A drop of cream in a cup of coffee. Is this some Zen thing?"

"I'm serious, Terry. What shape is the drop?"

"A circle."

"Right. It's simple physics. If you drop one liquid into another liquid, the drop spreads evenly in all directions."

"OK." Terry screws up his face. "What's that got to do with anything?"

"So, if someone released a cloud of fine particles into the air, they would spread in a circle."

Terry pauses. Then I see the light go on. "Not a triangle," Terry says.

"Exactly."

"But what if it were windy. Or someone releases it as they were driving?" ask Terry.

I lean over the cup and blow on the circle of white, turning it into an oval. "It would just stretch the circle in the direction the wind is blowing or the direction they were driving. Still, no triangle."

Terry stares at the coffee, nodding his head. He speaks slowly, as if choosing his words one by one. "So, if the CDC is thinking this is airborne, they're wrong."

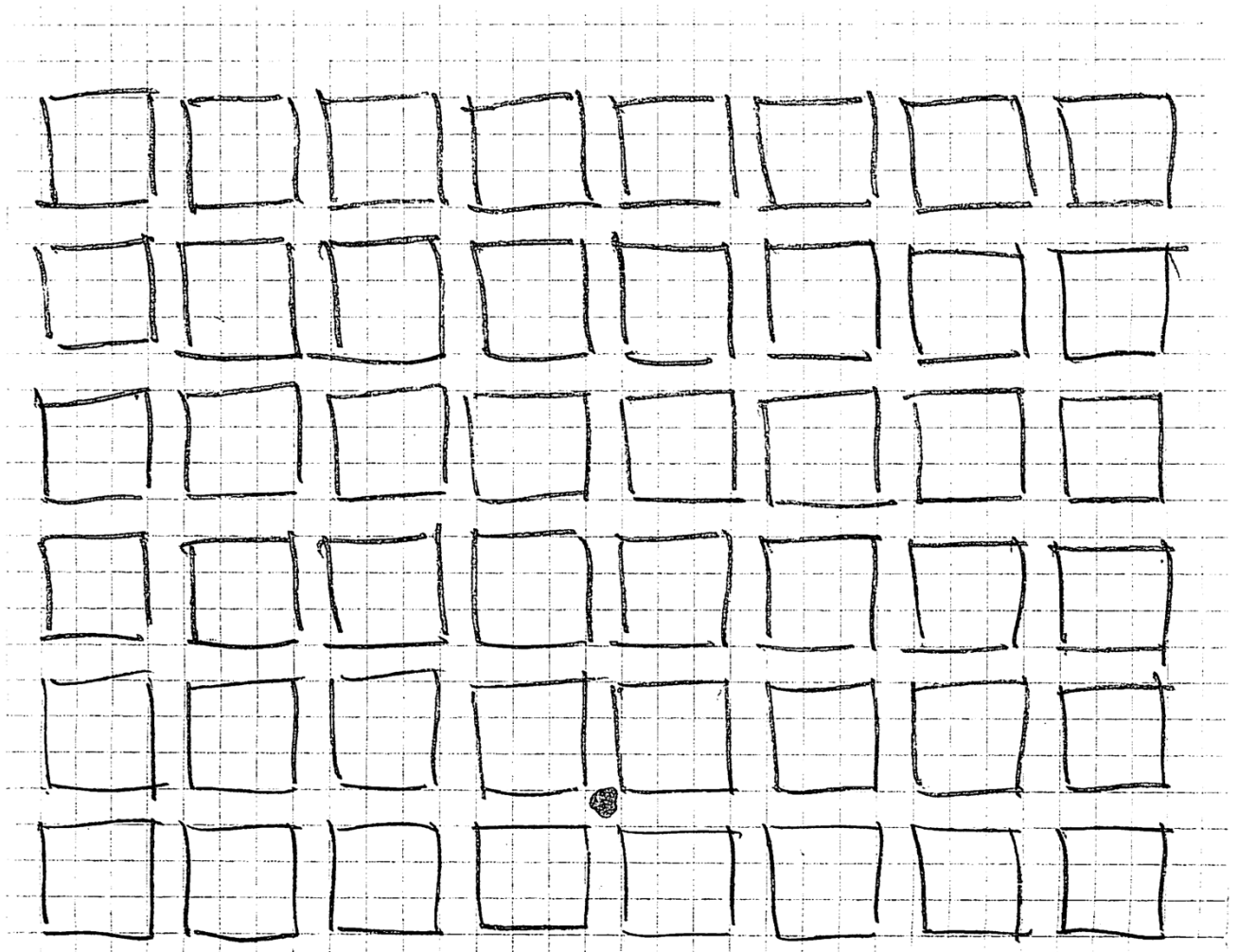
"Wrong as sin."

"OK. I'm with you. So, what made our triangle?"

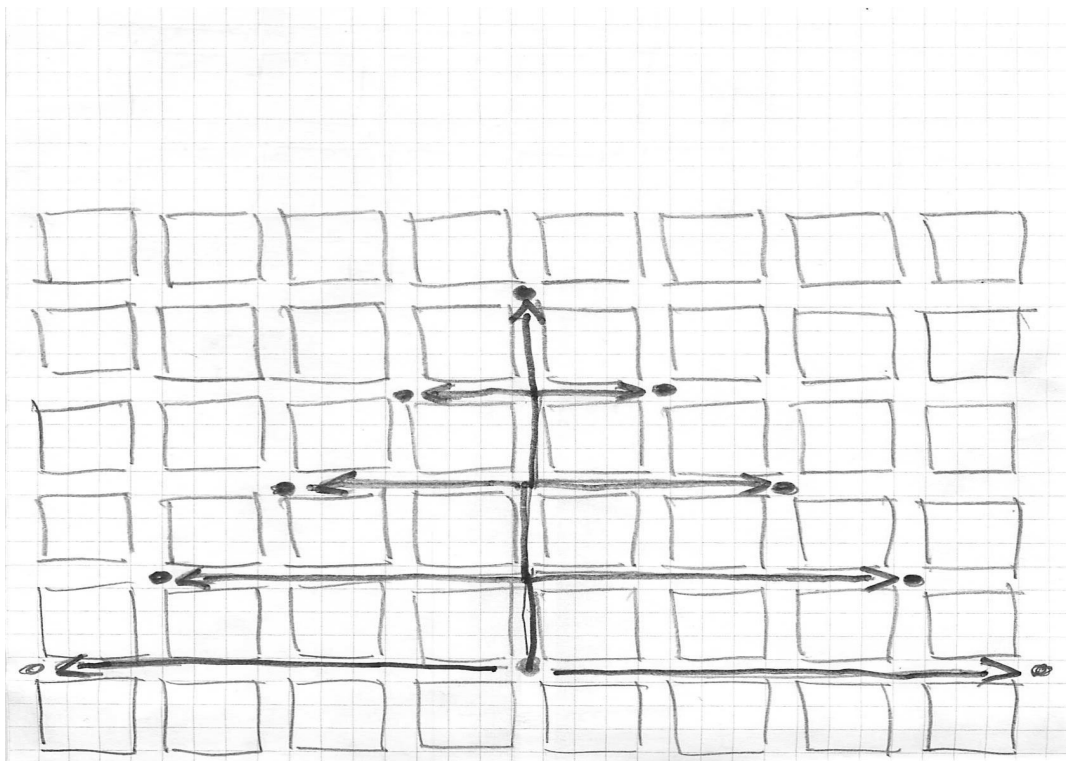
"Well, I'm not sure, but I have an idea." I look around the room for what I need. "Have you got a sheet of paper?"

"Sure." Terry opens a kitchen drawer and returns with a pad, tossing it in front of me.

"Thanks." I begin to divide the top sheet into a grid of large squares. I draw a single large dot at the bottom of the grid and turn the drawing towards Terry.



"Imagine these are city blocks and a source of the virus appears at this dot. Now let's make two rules. First, it can't move down the page, it can only move up or to the sides. Second, the concentration is decreasing so it can only travel five blocks before it's no longer dangerous. Let's mark all the intersections that are five blocks from the start point." Terry begins to draw, following my rules:



Terry stares. "A triangle. It's a triangle."

"Exactly."

"And the highest concentration is right near the release point, at the base of the triangle."

"Right again."

"But what would make it spread on the streets?"

"Not on the streets. Under the streets."

I turn to look at Terry, who is staring at my drawing.

"This thing isn't spreading through the air," I explain.

"It's spreading through the water."