Chapter 1

Twelve hours earlier

Sage

Tucked my blonde hair behind my ears and moved my microscope aside to make room for my notebook. Sample 4982 didn't seem to fit the predictions and this statistical analysis had to be with my boss by tomorrow. I wanted to recheck the database to see if there was any further information. It had been a long day and I couldn't remember when I'd last seen the memory card I needed. Perhaps I had dropped it on the floor? Looking around my lab, I stood up on my tiptoes to examine my storage shelves. When I spotted the empty space where my magnetic stirrer ought to be, I told myself for the hundredth time that I needed to stop using it to mix tea. If there were a surprise inspection, I'd be in trouble for misuse of company equipment.

Still searching, I picked up the newspaper I'd been using to steady my high stool and shook it out to see if the missing

memory card had fallen under it. My eyes fell on the headline. One Million Surveillance Mosquitoes Deployed to Every Military Base, Pledges Controller Lark. Not helpful. I didn't want the distraction. I needed my memory card, not to know what was going on in space or wherever those military bases were. The Controllers who ran the Stack honestly terrified me, and I tried to avoid news about them, especially news so censored it didn't make sense. Why would anyone need to use mosquitoes in space?

"Shoot." I remembered where I'd left it. I'd tidied my workspace two hours ago, following the strict regulations for Grande Pharma's hi-tech labs, and the memory card was now in my boss' office, in a storage cupboard. I looked at the clock on my workstation. It was going to be nineteen hundred hours, soon, and I was so ready to just go back to my apartment, get some chow and flop in front of the entertainment station.

I had been hired as a lab technician because I was diligent, though, and while I might fantasize about packing everything away and going home, I knew in reality I was going to finish my work before I clocked out.

I checked my access card was on a lanyard around my neck. Many of the doors in Grande Pharma would let you into places, but not back out again. I had heard stories about what happened to employees who got locked in a room full of killer bees or Ebola. That was never going to happen to me because I was careful and sensible.

I smiled when I saw the red panda sticker on the back of my access card. It wasn't *specifically* prohibited, and seeing a picture of my favorite extinct animal always brightened my day. I'd heard there were zoos on Earth, where they had collections of creatures that didn't exist in the wild any longer. As an animal-lover, I'd read all about lots of different species online and watched many shows featuring wild animals. Documentaries were my favorite, but I even loved talking dog movies. More than anything, I would love to see them up close.

I was saving credits to go to Earth, one day. From Alaxia, the planet where I lived in the new human colony, the hardest thing would be getting a permit to go to Earth. Our home planet was quite difficult to gain entry to. I think it was because some people thought Alaxia wasn't as nice, and Earth was worried if we could go there easily, we'd never leave.

I was happy enough, here. I had a good job, the air was clean and our education and healthcare systems were incredible. We didn't have the great outdoors or the natural environment that Earth had, because Alaxia was a desert planet and humans lived in the Stack, a big, wide skyscraper. It wasn't safe for us to go outside, which was fine by me because we had everything we needed here. I never even needed to leave my sector. That's how well planned this whole place was.

I went out of my pristine, white lab and into the metal-paneled corridor. I hurried to my boss' office and pressed the bell. When there was no answer, I opened the door and went straight to the store cupboard. The doors clicked closed behind me one at a time as I made my way to the high shelf where I knew the memory cards were kept with various databases. In Grande Pharma, information security was very important. Nothing was networked, and none of our findings were shared outside of the building.

It was the only way we could ensure our data was protected, but it sure was a nuisance sometimes.

"There you are!" I picked up the memory card then froze. There were voices outside, in my boss' office. At first, I paused because I wasn't expecting anyone else to be here after hours. I was about to open the door and leave, but I caught a few words.

"...crying like babies." There was hearty laughter. I stayed where I was and listened, some sixth sense inside me telling me not to go out there.

"The rats are certainly getting a lot more fragile, this year." That was my boss, Dr. Harker's voice!

"This crop was bred with less resistance to emotional strain. They reached maturity more slowly than their predecessors. I sanctioned their production as a reaction to the Unbreakables; the test subjects that can't be broken." That voice... I knew it, too. Director Harrow. She ran Grande Pharma's experimental division.

"How did you make them so weak-willed?" Dr. Harker asked.

"I arranged a few changes to the conditioning program delivered to the lower sectors. And, of course, we're blaming poor parenting for everything."

Wait. Rats... from different sectors? Parenting? I wanted to jump to conclusions, but I told myself that was the beginning of bad science and I kept listening.

Dr. Harker made noises of agreement. "If we can guilt trip the parents, they're less likely to feel confident taking any action to protect their offspring."

Why would lab rats feel guilty? I didn't want to understand what I was hearing.

"Precisely. Interventions are down twenty percent from last year."

"With all due respect, it's causing the lab techs a lot of stress to hear the test subjects bleating for their mommies." A third voice spoke, and I couldn't place it.

Director Harrow and Dr. Harker laughed. "Really? Are you telling me the lab techs are yellow-bellied this year, too, Dr. Smith?"

I peered through a crack in the door, where the hinge and the doorframe didn't quite line up. The three of them were right outside the door, with two of the burly security men Director Harrow always had with her.

"Have you seen the live feed for the cutting room floor? It is quite disturbing to watch."

"Except when a specific experiment garners my interest, I don't need to, Dr. Smith. I trust in the process of science. Don't

Defiled

you?" Director Harrow's voice was forceful. She wasn't someone to argue with, and I was surprised Dr. Smith had gotten so high in Grande Pharma without knowing that.

Dr. Smith nodded hastily. "Of course."

"Good. Did you find your notes, Dr. Harker?"

"Got them. Let's go."

They walked back out of the office and I counted to thirty before leaving. Ordinarily, I would have had no qualms about letting Dr. Harker see me in her storage cupboard, but after hearing that conversation, something didn't quite sit right with me.

I opened the door and stepped out. Tiptoed down the corridor back to my lab and tried to forget what I'd overheard. None of it really made any sense, anyway. Did we even test on rats? Their physiology was so different to humans. *Were* there any rats in the Stack? I didn't directly work on any experiments, I only processed results, but I thought we did everything on cell cultures.

As I finished my work, a strong feeling in my gut demanded that I go down to the cutting room to see what they'd been talking about. I convinced myself this might be my only opportunity to see real animals, even if they were rats. I didn't like the idea of harming any living creatures to get pharmaceuticals. We already had cures for every major disease.

A chill tingled down my back because I suspected I was going to find something far more sinister than animals, but whatever was going on, I had to know. I tidied my workspace, returned the memory card to Dr. Harker's storeroom, and instead of walking to the exit, I went in the opposite direction.

Walking along the metal-paneled corridor, I was uneasy. I was afraid of not being able to explain myself if I got caught. Eventually I came to the card-locked double doors, which were the furthest I'd ever been in this direction.

Taking a deep breath that only fed the butterflies in my

tummy, I swiped my card. The doors opened with a beep. I stepped through and looked around. It was just another silver corridor.

Walking further into this area, I tried to look like I had a right to be there. I rounded a corner and came to a sort of observation area, where the silver-paneled corridor walls had windows in the top half, and beyond...

"Oh my God." I felt like I'd been punched in the stomach. There were no rats. These were people. Human beings. In one room, they were bleeding out of every orifice. In another, nothing seemed to be wrong with them but their bodies were contorted into shapes that expressed great agony, and the glass was clearly soundproof but I think they were screaming. The third one... if anything was alive in there, I just hoped it would die quickly.

I stood there for far too long, trying to make sense of what I was seeing. My eyes didn't seem able to believe it, and my brain couldn't process this properly. After gawking at the horror before me, my legs finally figured out I needed to leave. I also knew without a doubt that I had to try to look calm and collected. If I flipped out or confronted anyone over this, I could end up in there. For morale support, I glanced down at the red panda sticker on the back of my lab access card.

Arranging my face into an empty expression, I turned and left, with the purposeful step of someone who took things like this in their stride. I remained calm as I headed for the exit.

"Working late, Sage?" Allysa, the receptionist asked as I passed her desk.

"Yeah, there was a database..." I waved a hand airily to imply that my day had been boring. The door was right there, and my heart was racing with a need to get through it, and out into the safety of sector three.

"See you tomorrow," Allysa said brightly. I nodded, tried to wave, and continued to the exit. My hands were shaking from the

effort of holding onto what I'd seen and my stomach was threatening to empty itself. What if someone found out I'd been down there, and decided to cancel my access card? What if someone was heading here right now?

I was a complete bundle of terror as I swiped my card against the access panel. The light went red. My card hadn't worked. The blood in my legs seemed to run somewhere else. I tried to steady my hands. I swiped it again and it went green.

Pushing the door open, still expecting someone to call me back or stop me, I walked out, trying not to show how completely petrified I was.

WHEN I GOT BACK to my apartment, I locked, bolted and chained the door, and finally let myself go. Tore my clothes off and left them in a long trail between the door and the bathroom. Shoes and purse were somewhere, but I didn't care where. I went to the shower and turned it on. Stepped in. Slumped on the floor and sobbed between bouts of dry retching.

The images kept haunting me. Human beings, in such hopeless states of distress. In my workplace. They had been right in front of me and I'd never seen. How could I have worked at Grande Pharma this whole time without knowing they were harming people in the name of science?

I retched again, unable to breathe as the force of my stomach kept me motionless on my hands and knees. My grandmother had told me such terrible stories from ancient times on Earth; something she'd called the Holocaust. She'd scared me with descriptions and my parents had been convinced she was imagining things. They had taken her to a doctor who diagnosed her with dementia and put her in a care home. I thought she'd been well looked after. Every time I saw her, she was quiet, and a little confused, but not shouting or crying.

What I'd seen today was just like what she'd described, but on a smaller scale. Paranoia seeped into my thoughts as I wondered, just how far did this go? My parents hadn't believed humans could possibly do anything like this, and neither had I. All our tech, our science, our medical knowledge... what was the price?

I stopped crying as my horror gave way to a dead feeling in my chest. This whole thing was inescapable. Here, in the Stack, we weren't populated enough for anyone to hide. If I didn't go to work tomorrow, someone would know why. The constant surveillance had always made me feel reassured that nothing bad could ever happen, because the only place we were truly alone was in our apartments. Now, I wondered if someone knew what I'd seen.

No. I had to go to work and pretend like nothing had happened, at least until I could think of a way to get news to Earth, where things like this were faded memories of a bad dream.

I DON'T KNOW how long I was in the shower for, but eventually my body calmed down enough that I could turn off the water, wrap a fluffy towel around myself and stumble to the refrigerator. There was cake. It was leftover from my birthday and there was probably enough to feed a dozen people, but I pulled out a fork, flopped on the couch and dug right into it, without even putting it on a plate first.

There was a mosquito buzzing around the room, but I couldn't see it. I decided if it came close, I'd swat it.

My mind had a chance to think through the situation.

Whatever was happening at Grande Pharma, I was in no doubt at all that management knew all about it. The computers were not networked and all experimental data was kept on memory cards. That meant all they had to do to erase any

incriminating evidence was to destroy the memory cards. Or lose them. And that would be a last resort.

There had to be dozens of naive, innocent techs like me who had no idea where the data came from. Every lab report was so carefully worded, that it was impossible for anyone to infer humans were test subjects.

What could I do about it? Law enforcement would want hard evidence, and anyway, Grande Pharma was so integral to the continued functioning of society that I doubted anyone would prosecute them.

Regardless of their methods, the Stack needed them. We couldn't ship anything from Earth in the quantities we would need to keep society running. Without Grande Pharma, humans in the Stack would die out.

I knew that. It was part of my training when I'd started working there. But all the same, what they were doing was unequivocally wrong and there was no means to make them accountable. This was an impossible situation.

Could I even quit my job without drawing unwanted attention to myself? Where else could I work? And anyway, every company always wanted a reference, so Grande Pharma would know where I'd gone.

If I left this job, even if they allowed me to go, I would struggle to find work elsewhere with a sudden departure and no references. If I couldn't get a job, I would have to move down into a lower sector than this one. The Stack was overcrowded, mostly because the lower levels bred too much, and as a result, the only people in the top five levels were people with the most important jobs. Lower down were law enforcement, the military, then sector ten and below were administrative things. Maybe I could get an admin job, but I didn't have experience doing anything other than my current role.

Seventeen through twenty-five did menial work, like manufacturing things and making the pre-packaged sandwiches and

other foods available for everyone in the Stack. No one minded them too much, salt of the earth, but I wouldn't want to live there. Factory foremen were down there, too. Every week the news told us of more money being spent on sectors twenty-five and below, and none of them were grateful for it.

Below that was the idle oblivion of a hundred thousand people with no jobs, no money, no aspirations and no way of supporting themselves. Drawing attention to myself as a trouble-maker was a fast-track ticket in that direction. It terrified me in a visceral way. Always had, even before I saw a film about it in school, where a woman got moved down. The film showed the people in sector thirty and they looked disgusting. I wanted to stay as far away from they're as possible. I couldn't even imagine how tasteless and unpleasant people in sector forty-two must look.

Never in my life had I felt so completely cornered, lost for a course of action, or shocked as I did at that moment. I had to keep calm. I had to carry on. I would go back to work tomorrow... or maybe I would call in sick? One videocall in the morning and I could take another day to figure out my options. I'd never been sick a day in my life and I wasn't certain they'd allow me a day off when they basically had the cure to every disease imaginable. But it had to be worth a try.

My mind felt calmer. My stomach still oscillated between feeling nauseous and demanding more chocolate cake. Suddenly, I was very sleepy, and I found my eyes growing heavy. I'm not sure if I even made it to my bed. The last thing I remembered was the sound of my fork clattering to the laminate flooring and the *thunk* of the chocolate cake following it.