Bloom

Yunnie employed three undergrads in her lab and one of them—the one she actually needed—was missing. She assumed it was a case of the midterm flu, which struck every semester just before exams. But of the three students she'd hired in the fall, she considered Bram the most likely to contract the imaginary bug. Bram the Ham, she called him, though not to his face. Even pale, timid Catherine, who was reliable but not terribly bright, was a more likely candidate to disappear midsemester than Andrea.

"So you haven't seen her lately?" Yunnie asked.

Bram looked up from a tray of papaver samples and removed one of his earbuds, letting the twisted green wire hang in front of his chest. "What?" he almost shouted.

A quavering female voice leaked into the lab, singing the first lines of "I Dreamed a Dream." Bram was minoring in theater, which he described as his passion, as if majoring in biology had simply been a concession to his tuition-paying parents. For weeks, he'd been listening to the soundtrack of *Les Misérables*, preparing for his role in the upcoming spring production. This, despite the sign posted directly above his workstation that read:

No music

No mischief

No mistakes

"I was asking about Andrea," Yunnie said. "Neither of you have seen her lately!"

"We're not in any classes together, so I probably wouldn't." He took a swig from his water bottle, wiping his mouth on his sleeve.

Catherine raised and quickly lowered her gloved hand. "Andi lives down the hall from me, but I haven't seen her this week?"

The ends of Catherine's sentences always lifted into questions, even when she was saying something true. Yunnie often encouraged her to state facts as facts to avoid inviting skepticism, but the girl seemed immune to such mentoring.

"I heard she's taking an extra class this semester, so she's probably just studying?"

"Well... more pizza for us then." Yunnie made an effort to smile as she stepped into the adjoining break room. She set the extra-large box from Antonio's on the table and lifted the top. The half-cheese, half-pepperoni combo looked particularly unappetizing today. "Come on in," she called. "Help yourselves."

Friday was the only day of the week when all three students' schedules overlapped in the lab, so Yunnie brought in food from off campus for a group lunch. It was a team-building strategy suggested by one of her colleagues, who said that his students appreciated the break from cafeteria food, and individual progress reports helped everyone feel like they were contributing to the lab's mission. Yunnie hadn't asked for his advice, but as a new assistant professor, simply walking down the hall was an invitation to older colleagues to tell her something she didn't know or recommend something she didn't do. Eating with her students struck her as a particularly strange practice—in Korea, professors would never—but there was no denying the animated conversations she heard when she passed her colleagues' labs.

"Antonio's again?" Bram slid two oily slices of pepperoni onto a paper plate.

Yunnie felt a familiar pressure on the right side of her face, as if her molars were about to crack. "Don't all college students live on pizza?" she asked.

Neither Bram nor Catherine laughed as they took their seats around the small conference table. Yunnie sat down across from them, trying not to look at Andrea's empty chair.

"So...how are the native samples coming along?" She asked as casually as possible, aware that Catherine sometimes seemed alarmed by direct questions.

"I'm about a fourth of the way through? I've catalogued the calendula through the hollyhocks."

Yunnie paused. "The what through the what?" Catherine lifted her eyes to the ceiling, scanning the dull white acoustic tiles from left to right. "I've catalogued the Calendula officialnalis through the Alcea...rosea?"

"That's right. Nice work, Catherine."

She insisted that her students—in class and in the lab—use the botanical names for flowers instead of their common names. Students frequently objected to this, as if the effort to be correct was simply too much trouble. The first time someone raised her hand in class and asked if it was really necessary to memorize the Latin, Yunnie had been so taken aback by the question that she didn't know how to respond. She simply stood at her lectern, the blood rising to her cheeks, wondering what Mr. Rhee, her old cram school instructor, would have done.

Mr. Rhee had been the most feared member of the faculty at the Yongin Hagwon, but also the most effective. Every day, he boasted that one-hundred percent of the students enrolled in his exam prep courses gained admission into their first-choice university, usually Seoul National or Yonsei. Some of them even got into American universities—Harvard, Yale, Stanford, MIT. But the price for results like these was accepting his teaching methods without question or complaint. Often, Mr. Rhee struck his students with a wooden ruler for the smallest offense—answering incorrectly, speaking too softly, crying because he'd raised his voice, glancing out a window when their eyes should have been glued to the board. "This is for your own good," he'd always shout. Or: "Someday, you'll thank me!" Whenever Yunnie came home with bright red welts on her palms, her parents would shake their heads and click their tongues at her.

"Study harder," they'd say.

Yunnie was certain that none of her students studied as hard as she did at their age, with the possible exception of Andrea. The rest would never survive the cram sessions, the back-to-back all-nighters, the thrill of being admitted to a top-tier university followed by the crushing realization that they'd have to do it all over again to get into the best graduate school, and then to land a respectable job after their Ph.D. Only someone who truly loved science would subject herself to a gauntlet like this. For a while, Yunnie thought that might be Andrea, who was easily the most impressive student she'd met since her arrival at California Polytechnic. It was something about the girl's questions—thoughtful, intelligent questions that spoke to a deeper kind of curiosity. Once, Yunnie asked what had first inspired her interest in plants and Andrea described blowing on a dandelion as a child, watching the cottony white tufts float "away, away, away." The expression on her face as she told this story was so earnest and filled with wonder—it was hard for Yunnie to look at her and not see a younger version of herself.

She took a small bite of pizza, frustrated by the sad excuse for a lunch gathering, which felt so lifeless without Andrea's presence. For a while, she tried to keep the conversation going, but her attempts to encourage Bram and Catherine sounded patronizing and insincere. Yunnie knew, and she assumed they knew too, that their work assignments were largely inconsequential. They entered data, took measurements, and catalogued samples. If they disappeared for a few days, or even a few weeks, nothing in the lab would suffer greatly. The only person Yunnie had ever entrusted with real work was Andrea, a decision she was beginning to regret.

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Although she rarely had time to eat lunch during the week, on Fridays, she lunched twice. Once with her lab assistants, and then a second time

with Helen, the other new assistant professor hired by her department that year. At first, the pairing—suggested by their department chair—seemed like an inconvenience, yet another hour-long block to add to her already busy schedule. But she agreed to the meeting because it didn't seem wise to decline. She also thought it might be helpful to have a peer with whom to navigate the first year as tenure-track faculty. Over time, she'd come to enjoy Helen's company, to appreciate how frankly she spoke about everyone, students and colleagues alike. And she did so in her beautiful South African accent, which made her sound charming, even when she was bring critical, which was her default state. This fascinated Yunnie, the idea that they didn't have to hold it all in.

When she arrived at the faculty dining commons that afternoon, Helen was in a particularly bad mood.

"He's a prick," she said, before Yunnie had even sat down. "An absolute prick."

They tried not to use names in the faculty commons, but Yunnie knew of whom she was speaking. Helen complained about the same grad student every week.

She lowered herself into a plush, velvet-covered chair and unfolded a napkin on her lap. Helen had already ordered a salad and started eating, which seemed somewhat rude, especially since she'd arrived on time. She always arrived on time, for everything. Yunnie signaled a passing waiter. She didn't want to waste any part of their hour flipping through the enormous menu, so she ordered the same salad as Helen even though it was liberally sprinkled with walnuts, which she didn't care for.

"Yesterday, I told him to prepare sterile saline solutions," Helen continued. "And he said I should have one of the undergrads do it. Can you believe that? Second year Ph.D. candidate, and he's trying to tell me how to assign work in my lab."

"So what did you say?"

"I told him to do what I asked or go home, so he prepped the solutions, but you should have seen the look on his face. I swear he would have murdered me in my sleep if he could have gotten away with it."

Helen studied zebrafish. She was interested in their spinal columns, which had a flexible, zipper-like construction that could self-repair after injury. Before the department had even hired her, she'd received a major federal grant during her post-doc to study how self-repair could translate to the development of fetal spinal cords. She was only thirty-two years old, four years younger than Yunnie.

"One of my students didn't show up again today," Yunnie offered. "My best student, actually."

Helen sighed dramatically. "It's like they don't even realize this is their job."

Yunnie took a sip of ice water. Because Helen had a grant, she could afford to employ graduate students in her lab and pay them an almost

living wage. Yunnie had no grant yet, so she was left with undergrads who worked in exchange for a line of experience on their resumes. "Job" wasn't quite the right word for what she provided them, but she didn't bother to correct the mistake.

"Have you contacted the student yet?" Helen asked.

"I sent her an email before I walked over."

"Oh, God no, Yunnie. Students don't email. Not like we did when we were in school. Besides, email's not urgent enough for something like this. You have to text her."

She'd never texted a student before. She rarely texted anyone these days. "I shouldn't call her instead?"

Helen's eyes widened. "Are you kidding? They're millennials. They don't talk on the phone. My husband's in Massachusetts and we hardly talk on the phone."

There were so many things about Helen's life that Yunnie found interesting. Living apart from her husband eight months out of the year was one of them. He was the head of a research group on cold water marine biodiversity, based in Woods Hole on Cape Cod. Although good tenure-track jobs were hard to come by, Yunnie still didn't understand how Helen could stand to live so far away from someone she loved. It had been almost a year since she'd left Ji-Woo in Seoul, and she still hadn't recovered.

"If this is her first absence, you have to be firm with her." Helen wiped a dot of French dressing from the corner of her mouth. "You have to nip this in the bud or she'll walk all over you."

Yunnie's salad arrived and she slowly raked her fork over the walnuts, moving them off to the side of the gold-rimmed plate. She couldn't bring herself to say this to Helen, whose competence she so admired, but it already felt like her students were walking all over her, not only the ones in her lab, but those she taught. Yunnie thought the majority of them were spoiled and rude, accustomed to being treated like customers instead of students. There was no greater proof than the little surveys they filled out at the end of the semester, as if her courses were nothing more than services they'd paid for. Whenever she thought about the evaluation comments from her fall botany class—"way harsh grader," "doesn't seem to like students," "can't understand what she's saying," "makes learning about as un-fun as possible"—her skin blistered with anger. "Un-fun" wasn't even a word, yet she and her department chair had discussed it for the better part of an hour—him, peering at her over his glasses, looking deeply concerned.

"The Korean system you were educated in was probably very different," he'd said. "In American higher ed, we have to engage our students as learners. We have to figure out how to turn the lights on."

Yunnie had nodded agreeably throughout their meeting, even jotting things down as he spoke, which he seemed to appreciate. Later, in the car, after she'd dried her eyes, she reviewed her notes, which weren't really notes at all, but simple words and phrases that she'd written and circled over and over again, probably in relation to how often her chair had repeated them. Have fun, he must have said at least a dozen times, judging from the whirlpool of circles she'd enclosed the words in. Engage. Inspire. Relate. Afterward, Yunnie went to a local copy center and ordered a large plastic banner. HAN LAB, it read, the letters alternating between neon pink and yellow, with flowers of different shapes and sizes printed in the background. She hung the banner in her lab, not on the blank wall that actually needed decoration, but the wall her colleagues could see when they walked past her windowed door.

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The real shame about Andrea's absence was that it was taking place during the super bloom, a brief window of time after an unusually long wet season when the California deserts filled with brightly colored wildflowers. It was the reason she'd applied for and accepted the position at Cal Poly, tempting as it was to remain in Seoul.

"Super blooms are cyclical," she said to her students, standing at the front of the bus as it bounced along the country road. "Most of you were probably six or seven years old when the last one occurred in 2005. You'll probably be in your late twenties or early thirties during the next one. Can you imagine how different your lives will be then?"

She assumed that many of them would be married, have children or careers, and big, tidy houses with shiny green lawns. It was strange to think that these T-shirt-clad teenagers, with their sunglasses perched on their heads just so, would someday have more than she did, but the reality of her life was that she had chosen science.

Her students seemed unmoved by the thought of their future selves, so she recalled her department chair's advice to better connect her research and teaching.

"As some of you know..." she paused, wondering how many of them actually knew this about her, how many actually thought of her at all, "I research hypergrowth in plants, meaning that I study what causes plants to reproduce rapidly in nature. My goal is to recreate those same conditions in my lab so I can apply my findings to improving the food supply. The super bloom is one of those rare examples of hypergrowth that we can predict because it happens roughly once a decade, so I've been taking samples and soil measurements out here for the past ten months. What all of you are about to see is the super bloom at its peak."

She tried to make her voice sound as animated as possible, but her students simply stared at her with dull, vaguely resentful expressions. Bram and Catherine, whom she'd dragged along to collect additional samples, looked particularly put-out by the timing of this field trip during their midterms.

The trip had actually been her department chair's idea. He'd even given her five hundred dollars from the general reserve fund to charter a bus and take her entire intro class to the Carrizo Plain, just east of the campus. She thanked him for the gesture, but thought it was suspicious, as if he'd received complaints about how boring the class was and wanted to help her liven it up. She scanned the faces on the bus, coming up with a short mental list of possible suspects, students so spoiled and self-important that they'd go straight to the chair to complain.

Yunnie didn't complain as a nineteen-year-old undergrad when she worked for a professor who frequently barked obscenities at her in the lab. She didn't complain when one of her advisors in grad school published articles that included her data, not bothering to list her as a co-author even though she'd drafted the text. When another advisor lightly brushed her cheek at a reception, his breath reeking of whiskey, and said that he looked forward to sleeping with her after she finished her doctorate, she said absolutely nothing. Science was hard. Being a scientist was even harder. She fed her students pizza, took them on field trips, held her tongue when they made up lies about having migraines or losing their laptops, told them "good job," and "nice work," and "try again." She didn't understand what any of them would have to complain about.

As the bus neared the entrance to the Carrizo, she reminded everyone to be respectful of other visitors to the park.

"And remember to meet back here at the bus at exactly two o'clock, not 2:05 or 2:15..." She paused, irritated that no one even had the courtesy to look at her while she was speaking, an offense that would have resulted in a hard smack from Mr. Rhee's ruler. She unclenched her jaw, aware that she was grinding her teeth again, something she'd been catching herself doing more and more lately. "Please meet back here at two o'clock sharp," she repeated, louder this time.

The students still weren't listening. She realized they were all staring out their windows, which opened onto the blooming desert, to a carpet of bright orange wildflowers so dense, there was hardly any trace of the dull beige sand they were growing in. The flowers stretched on toward the horizon line, invasive and aggressive. Just two days earlier, they'd only reached half as far.

"It looks like Cheetos," she overheard someone say.

Normally, the crude comparison would bother her, but she sensed the excitement in the boy's voice, so childlike and uncontained. She could sense it in the others too as they exited the bus, some of them racing from the road to a wide trail leading down a hill. *Don't run*, she wanted to shout, but it was the fastest she'd ever seen some of them

move, and she marveled at the changes she observed in them. Everyone had their phones out, raising them in the air to take pictures. There were group shots and selfies and close-ups of the flowers themselves. Farther down the trail, two girls who often nodded off in class lifted their arms, tipped their heads back, and began spinning in place, smiling at the sun overhead. One of their classmates was crouching on the ground, taking a video of them.

"I would have come when you first asked if I'd known it looked like this," Bram said. He was jogging down the trail backwards as he spoke to her.

She'd invited her lab assistants to accompany her to the Carrizo when the bloom started a week earlier. Bram had declined, citing play practice, while Catherine had a physics exam that she needed to study for. Only Andrea had been eager to join her, but she'd disappeared before they had a chance to go.

"You're going to fall," she said to Bram, who laughed as he turned and jogged away.

Yunnie stopped midway down the trail, watching her students descend the hill. Farther below, the ones who had taken off running reached the valley, surrounded by overgrown, knee-high wildflowers painted in huge swaths of orange and purple and gold. They weren't snapping pictures or talking or even laughing anymore. They weren't doing anything except turning around in slow circles, taking it all in. Yunnie had been coming out to this very same place for almost a year, so focused on her purpose that she'd become almost immune to its beauty. Although it was hard not to notice the changes in the desert over time, she'd forgotten what it was like to experience the violence of color all at once, to view something that most people only saw in pictures. She hoped her students felt awed, the same way she'd felt awed as a child when she dropped a seed into a milk carton filled with dirt and created something living.

Yunnie breathed in deeply, feeling the dry desert air in her nostrils, the midday sun on her face, and for the first time since arriving at the university, she felt strangely content, like she was doing her job the way everyone wanted her to. No one could accuse her of not turning the lights on, not today. She took out her phone and snapped a picture of the hill, then bent down for a close-up of a wildflower, a *Ludwigia decurrens* that resembled yellow clover, with four prominent petals that curled upward, forming a shallow cup. She scrolled through her address book and attached the two photos to a text message.

"Wish you were here," she wrote.

Before she could think better of it, she hit "send."

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The elation that Yunnie felt during the field trip was short-lived. As the stress of mid-terms entered its zenith, her students started to come undone, even more so than she remembered from the previous semester thanks to the specter of graduation. Andrea never returned to the lab. Students cornered her after class—the girls in tears about how poorly they'd scored on their practice exams, the boys angling to know why this answer or that answer couldn't be considered correct. Her inbox filled with emails from the health center about students who had strep throat, mono, upper respiratory infections, and vaguely described symptoms that sounded like nervous breakdowns. Parents left voicemails, requesting exam extensions on behalf of their children, their tones alternating from pleading to entitled to pitiful.

At Helen's urging, Yunnie refused to get caught up in such distractions. She also gave herself permission to stop spending so much time prepping for class and grading homework assignments. After all, Helen reasoned, there were only a few more days of the super bloom left, and then another decade before it happened again. It made no sense to let the opportunity pass without making the absolute most of it. Yunnie's efficient sixty-minute trips to the desert soon turned into three- and four-hour-long visits during which she wandered farther and farther into the valley, walking stick in hand, sample kit in her backpack. Despite wearing liberal amounts of sunscreen, her fair skin began to burn, and her clothes loosened thanks to the nuts and apples she ate in the car instead of actual meals. When she broke her tooth on an almond, exposing the red, raw nerve inside, she filled her pocket with ibuprofen and told herself that she could go to the dentist after the super bloom ended.

The window was closing and she could feel it, which made her increasingly anxious about time. At first, she tried not to think about it, how different her life would be when the next bloom arrived. Surely, she'd be a tenured full professor by then, assuming that she checked off all the right boxes, always followed her chair's advice, and didn't offend any of her colleagues. She'd probably have at least a few of those grants that had proven so elusive up until this point. And maybe she'd even be a step or two closer to her goal of addressing food supply shortages, preventing famines like the one in North Korea that she'd read about so obsessively as a teenager. She took solace in the fact that these were all good and meaningful things, things worth working hard for. But then her thoughts wandered back to Ji-Woo, and no amount of resolve could compensate for her loneliness.

When she'd first accepted the position in California, she'd invited him to come with her, even though she knew he wouldn't. He had his own work at Seoul National, his own research lab, his own goals to pursue. During her first few months in the States, they'd tried to stay connected by phone and Skype, but eventually, he stopped being available to talk. Then he'd go days and even weeks in between emails, later explaining without apology that he'd been too busy to write. When his texts evolved from one-word replies to the occasional emoji to nothing at all, she was sad but not surprised. Her parents had warned her about this, telling her that if she left Seoul, an eligible, educated bachelor like Ji-Woo would quickly find someone else to marry, while she would marry her work. Their suggestion had angered Yunnie—this, coming from the same parents who had borrowed money to bribe her way into Mr. Rhee's classroom. It was as if they'd raised her to walk the plank on two very different ships.

For days after the field trip, Yunnie kept her phone at her side, going so far as to place it in the breast pocket of her pajamas while she lay in bed, fitful and sleepless. Even when it didn't ring or vibrate, she'd stare at the cracked black screen, waiting. That day at the Carrizo, she'd texted Ji-Woo the pictures of the super bloom, hoping he'd understand why she had to come to this strange and friendless place. But Ji-Woo didn't respond to her message, and some part of her knew that he never would.

Despite the worsening pain in her mouth and the exhaustion she now felt marrow-deep in her bones, she continued to return daily to the Carrizo, watching the colors grow paler with each visit. On the second to last day before spring break, she saw heavy, bruise-colored clouds gathering in the distance, bringing an unexpected storm that would likely drown out the remaining wildflowers for good. She let her morning class out early and picked up her walking stick and sample kit from her office, anxious to drive to the desert before the rain started. As she raced across the guad toward the parking lot, she noticed a familiar face. She barely lost a step at first—familiar faces were everywhere on this campus—but suddenly, she stopped and turned around. There, lying down on a bench, was Andrea. She had her head in the lap of a boy who was looking down at her with such tenderness, Yunnie couldn't help but clutch her chest. The boy said something that she couldn't hear and then swept a lock of Andrea's red hair away from her face. Both of them laughed, their fingers interlaced, and Yunnie felt herself moving toward them even though she wasn't sure if she should.

The boy looked confused when she approached them, and then even more confused when she reached out and grabbed a fistful of Andrea's hair, yanking so hard that the girl yelped and stumbled to the ground. Yunnie felt someone's hand on hers, trying to pry and claw it open, but she tightened her grip, pulling on the thick lock of hair like reins. Andrea fell to her knees, swinging her arms around wildly but unable to break free or see the source of pain behind her. The air filled with gasps and screams from around the quad. As the screams grew louder, accompanied by the sound of rushing footsteps, Yunnie lifted her walking stick and brought it down on Andrea's open palms once, twice, and then a third

time before she felt her arms being restrained from behind, her left shoulder dislocating from its socket with a pop. The walking stick fell on the sidewalk as she let out a cry that drowned out all the others. And then her feet left the ground and her body felt weightless, beautiful and weightless, as someone lifted her up and carried her away, away, away.