

**IT'S A CRAZY WORLD OUT THERE.
BE CURIOUS.**

—Stephen Hawking (1942-2018)

1.7167° N | 110.4667° E

**KINABATANGAN
RIVER BASIN,
MALAYSIA**



▶ SWEAT DRIBBLED down the back of a sticky neck. Hot feet swelled inside boots that got tighter with each step. Even breathing was hard, like trying to inhale with a wet towel covering your face. If this was immortality, thought Cruz, it was way overrated.

Cruz Coronado may have been trekking through a steamy rainforest in northern Borneo with the explorers and faculty of Explorer Academy, but his mind was thousands of miles away.

More than two weeks had passed since he'd been inside the Society's top secret Archive for a glimpse of his mother's scientific logbook. A single page, the one his PANDA unit had partially revealed, was all the Synthesis had allowed him to see. Even so, it was enough for Cruz to finally read his mom's full entry. In it, she explained that she'd handled her cell-regeneration serum without gloves. A scratch on her hand had exposed her unborn child—Cruz—to the liquid. The mishap had likely altered his developing DNA. In short, it was possible he would live...

Forever.

It was a stunning discovery. And yet, somehow, it wasn't. Looking back, Cruz realized he'd hardly been sick a day in his life. Bumps, bruises, sprains, and other minor injuries had always been quick to heal. Cruz had figured he'd simply been lucky, but now he knew it was more than that. So much more.

In her notes, his mother had predicted the full power of the serum would kick in when Cruz turned 13. Apparently, it had—and just in time for him to do battle with Nebula, too. The gash Cruz had gotten on his leg when Prescott nearly drowned him in Hawaii, the burn on his arm from Mr. Rook’s laser blast, and his broken toe and concussion from the fall into the cavern in Turkey had all mended within a day or two—faster than ever. Not that Cruz had given any of these injuries much thought when they’d occurred. Now they were all he could think about.

Damaged cells need time to regenerate, right? Cruz figured he was as human as anyone else when it came to things that would cause a quick death, which Nebula must have known, too. Is that why his mother had not survived the fire in her lab? Her cells couldn’t repair her injuries fast enough? Or, as an adult, had the serum affected her differently? Cruz had millions of questions, but how was he supposed to get any of them answered when the Synthesis wouldn’t let him see the rest of the logbook? Emmett was the only one who knew Cruz had been inside the Archive, though he had no idea what Cruz had learned there—and he could never know. No one could, not even Dad or Aunt Marisol.

“Ow!” yelped Lani.

Cruz had bumped her calf. “Sorry.”

Lani was stopped on the trail, her head tipped back. Cruz followed her gaze, his eyes roving up the tangle of thick branches that wove the canopy in layers too numerous to count. Here and there the leaves parted, allowing thin beams of sunlight to slip through. Fruits and flowers punctuated the greenery like red, yellow, and white exclamation points. Squinting, Cruz searched the limbs. “Lani, what are you—”

There! Among the leaves still glossy from an overnight rain, Cruz spotted a patch of reddish gray. A monkey! Its back to them, the animal was crouched on the fork of a twisted tree trunk about 20 feet up. The bright orange-red fur on its head, neck, and shoulders turned a soft gray as it extended down its arms, legs, and tail. The monkey’s thin tail was nearly as long as its body. A gray hand with long fingers lazily

plucked unripened figs from a tree. By now, Professor Ishikawa had seen the animal, too. He was pointing up, trying to quietly alert everyone to what was above.

Crack!

Someone behind Cruz stepped on a twig. Turning its shoulders, the monkey glanced down and the explorers began to chuckle. The monkey had the biggest nose Cruz had ever seen! Long and droopy, the appendage hung past its mouth like a giant orange pendulum.

“That’s a proboscis monkey,” whispered their teacher, hushing them. “That nose might seem funny to you, but I can assure you that lady monkeys find it quite attractive.”

That got even more giggles.



“Proboscis monkeys are excellent swimmers,” added Professor Luben. “His fingers and toes are partially webbed. They help him out-swim crocodiles, one of his main predators.”

Once the monkey had finished eating, he reached for a shaggy vine. Pushing himself off the V-shaped trunk, he swung his bulging potbelly toward another branch, stretched a thin, hairy arm out to catch it...

And missed!

This time, Professor Ishikawa didn't attempt to quiet their laughter. “They're not always as graceful on land,” he said.

Cruz spotted another smaller monkey on the second tree. It had a much shorter nose. “There's a female,” whispered Professor Luben.

When momentum brought the vine back, the female caught the male by his leg and pulled him onto her limb. The pair began to climb and were soon lost in the dense foliage of the canopy.

As the group continued on, Cruz glanced back, looking for Aunt Marisol's tan-and-pink safari hat. He was close to the front, while she'd brought up the rear. There she was—yep, still near the back. All their teachers had joined them for their hike through Borneo's Kinabatangan River Basin. Cruz suspected it meant they would be breaking up into teams for a mission. His hunch soon proved correct. Another half mile up the trail, Monsieur Legrand, who was leading them, stopped next to a grassy bog. “We'll take a short water and snack break here, then hand out your assignments,” he announced.

Cruz rested his backpack against a cracked log, which was being used as a freeway by a line of busy termites. He pulled off one glove to pop open his water bottle, lifted the aluminum canister to his lips, and let the icy water flow down his raw throat. The chill that hit his stomach sent a welcome shiver through him. Ahhhh! Catching a whiff of lavender, Cruz watched Sailor take the top off the bottle of Fanchon's organic mosquito repellent. “You're really layering that stuff on,” he said, taking another swig.

“You can't be too careful.” Sailor lifted her chin, closed her eyes, and spritzed.

“What is that—four layers now?” teased Cruz.

“Five.” When he laughed, she said, “Don't come crying to me when you're covered in welts.”

“You do know it has catnip in it, don't you?” said Emmett.

Sailor's eyelids flew open. “It does?”

“It's one of the active ingredients.”

“Great,” grunted Dugan. “You'll repel the mosquitoes but attract the leopards.”

Cruz laughed, nearly spitting water all over Bryndis. She dodged out of the way in the nick of time but was laughing, too.

Professor Ishikawa was signaling for them to gather round. “You're standing deep in the heart of one of the oldest rainforests on Earth,” he explained. “The jungles of Borneo are home to more than two hundred species of mammals and four hundred different kinds of birds that we know of. It's one of the few places in the world where elephants, rhinos, and orangutans all live together.” He scanned the semicircle of students. “But your task is not to seek the obvious. Today, your mission will be to look for the rarely seen, even the unknown. On our hike, you've probably trekked past hundreds of creatures without realizing it: spiders, ants, snails, frogs, and so on. They may have been under the leaf litter, tucked into a knothole, or perhaps”—he nodded to a light-pink-and-white orchid next to him—“in plain sight.” Professor Ishikawa bent to lightly touch the flower and several petals shrank from his fingertips!

There was a collective gasp as the flower began to move.

“Say hello to the orchid *mantis*,” said their teacher. “This insect camouflages itself as part of the blossom in order to catch a meal. He's pretty good at fooling bees, flies, and—by your expressions—explorers. Come take a look.”

Upon closer inspection, Cruz was able to make out the bug's long, triangle-shaped head, whisker-thin antennae, and six petal-like legs. But it wasn't easy. The soft blend of pale pink and white on its body so perfectly matched the flower that it was hard to tell where the orchid ended and the mantis began.

“Wow!” Emmett’s magnifying emoto-glasses were yellow spirals of amazement. “Professor Ishikawa, how did you ever see him?”

Their professor gave a knowing grin. “Practice. Which is precisely the point of today’s mission. Here’s how it will work: Each team will be assigned a small section of the rainforest to explore. Use your mind-control cameras to take photos of the animal and plant life you observe in your area. Your cameras are linked to the Academy’s library database and will help you identify what you find. Unless, of course, you uncover a new species.” His grin widened. “Wouldn’t that be something? Be sure to take good field notes on your tablet as well, for your team field



report. Those are due at the beginning of class on Monday. Professors Modi, Coronado, Luben, and Benedict will lead the teams. Monsieur Legrand and I will circulate to check on your progress. Each faculty leader has already been assigned a search area. All that’s left to do is match the faculty to teams. Monsieur Legrand?”

All eyes went to their survival instructor, who was lifting a small black velvet bag from his pack. The explorers knew it well. They were going to draw for assignments.

“Remember your survival training,” said Monsieur Legrand. He was shaking the fabric pouch to mix the chips inside. “Stay alert. Step carefully. Don’t wander away from your team. Keep hydrated. Have I forgotten anything?”

“Bug repellent,” called Sailor. When their teacher said, “*Oui. Merci, Sailor,*” she gave her teammates a look of satisfaction.

Monsieur Legrand was holding the bag out to Professor Benedict.

“The team that gets Professor Benedict will have the best photos,” Emmett said to Cruz. “She’ll have good tips for macrophotography.”

Emmett was right, but Cruz was hoping they’d get Aunt Marisol.

The journalism teacher plunged her hand into the sack and brought up a chip. “Team Earhart!” she said.

Professor Modi was next. Cruz held his breath waiting for the verdict. “Galileo.”

That left Aunt Marisol and Professor Luben, who was rubbing his gloves. He dipped a hand into the pouch. “I’m with ...”

Cruz’s pulse quickened. *Come on, Aunt Marisol.*

Lifting his arm, Professor Luben glanced up at the chip in his palm. “Team Cousteau!”

So close!

“Dr. Coronado, that means you’re with Team Magellan,” said Professor Ishikawa.

As Aunt Marisol passed Cruz, she flipped up the brim of her hat and gave her nephew a smirk that said, *One of these days.*

Cruz gave her an I-sure-hope-so grin in return.

“Explorers, compared to your other missions, I know this may seem easy,” said Professor Ishikawa. “But don’t take it for granted. A good explorer needs sharp observation skills. It takes patience to learn to look beyond the tip of your nose, but when you do”—he motioned to the orchid mantis—“it can make all the difference.”

“Did he say tip of your *nose*?” Lani nudged Cruz. “We should name this mission Operation Proboscis.”

“Splendid idea, Lani!” Professor Ishikawa swung around. “That’s what we’ll call it: Operation Proboscis.”

Lani smiled so hard her eyes disappeared.

“Leaders, you may depart when your team is ready,” instructed Professor Ishikawa. “We’ll meet at the lodge at four this afternoon.”

“Team Cousteau?” Professor Luben motioned for them to gather round. “I have our search coordinates. Dugan, don’t forget your hat. Cruz, be sure to put your other glove back on. That goes for the rest of you. Keep as much of yourself covered as possible. We don’t need anyone coming down with dengue fever or malaria.”

Cruz tucked his water bottle into the side pocket of his pack, pulled up his socks, and slipped on his other glove. Some of the teams were backtracking, but Professor Luben was leading Team Cousteau farther along the trail. Slinging his pack onto his shoulders, Cruz fell into line behind Emmett, who was following Sailor, Bryndis, and Dugan. Lani brought up the rear. After hiking for about 10 minutes, they took a fork. The path quickly narrowed. Thick broadleaf bushes hugged the trail so tightly that they had to turn sideways in some spots to make their way through. As he wriggled past a plant with long purple nettles, Cruz was glad Professor Luben had been so insistent about protecting their skin.

“I’ve been thinking,” Lani whispered into Cruz’s ear, “about the clue.”

Cruz had been thinking about it, too. Constantly. Not quite two weeks ago, they had unlocked Cruz’s mom’s journal for the latest hint. “To find the seventh cipher, you must seek both the ordinary and the extraordinary in an object we both hold close to our hearts,” a holographic Petra Coronado had directed. “Something others use to forget the past will

reveal *your* future. Your destiny is yours to write, Cruz.”

The cipher!

Cruz, Emmett, Lani, and Sailor had agreed the solution had to be the cipher. It was the most extraordinary thing Cruz had that his mom also held dear. But what was ordinary about it? They carefully studied the engraved black marble cipher from every angle, snapping apart the wedges to inspect them individually. However, they didn’t find anything that would lead them to the seventh piece. Sailor suggested that Cruz’s mom might be referring to his silver holographic dome. After all, it *had* contained the first fragment of the cipher. Cruz had examined it as well but found nothing. He had drawn the line at taking apart the holo-dome. Although Emmett had assured him he could put it back together, Cruz was not willing to take the chance.

Cruz worried that his mother could be talking about something she’d given him a long time ago. Most of his stuff was back home in Kauai. Cruz had his father search his bedroom for books, toys, games, robotics, surfing gear—anything that might fit the description of being both ordinary and extraordinary. Unfortunately, his dad had come up empty. He’d promised to keep looking. Cruz hoped it wasn’t something he’d had when he was really young, like a stuffed animal or a picture book. If that was the case, it was likely long gone.

Cruz glanced at Lani as they scooted shoulder to shoulder down the trail. “What is it?”

“She said your destiny was yours to *write*. What if she was referring to one of the pens in her box? Maybe it writes with a special ink or has a clue rolled up inside.”

“We thought of that,” replied Cruz. “Emmett and I checked the pens. As far as we can tell, they’re all basic pens—well, with the ink dried up, of course. One of them was a paintbrush. It has an angled tip, like you’d use for calligraphy. Nothing special about it that we could see.”

Lani sighed. “I thought I was onto something. What about you? Any ideas?”

“Nope,” said Cruz. “I’m hopeless.”

“Not hopeless,” she insisted. “Just stuck. You’ll get unstuck soon.”

“I’d better. If Nebula figures it out before I do—”

“Cruz! Lani!” Professor Luben was waving from a bend in the trail.

They had fallen behind. Hurrying to catch up, they saw the path ended in a thicket. Tall grasses and ferns sprouted out of the ground like giant fountains. Their teacher told them to spread out about 20 feet apart but to keep the person next to them in sight as they explored. Positioned between Sailor and Bryndis, Cruz stepped carefully through the leaf litter. Bending to peer beneath a frond with thick purple stems, he discovered a cluster of about 20 lime green pitcher plants. They reminded him of a school of hungry fish, their oval mouths turned upward and open wide. Unlike the pitcher plants on Mahé in the Seychelles, these had lids that were far too small to cover their openings.

Cruz snapped a few photos. His MC camera identified the plants as *Nepenthes ampullaria*, common name: flask pitcher plant. He learned that this plant collected and digested leaves instead of insects. No wonder their lids were so little. They weren’t really necessary! Cruz was going in for a closer shot of the pitcher plants when he spotted a gooey brown string hanging from a leaf. He lifted the leaf with his thumb and saw that the string was actually a worm!

“Hey there, little guy.”

Cruz went down on one knee. The worm was only about an inch long with yellow and black stripes running lengthwise down its dark brown body. It was using most of its body to reach out to Cruz. Although he wanted to hold it, Cruz remembered his training and resisted. Instead,



he took a picture of the friendly worm, then waited for his MC camera to identify it.

Haemadipsa picta, common name: tiger leech.

A type of annelid, or segmented worm, the tiger leech feeds on the blood of animals. It has two suckers, one at each end. Attaching its back caudal sucker to the undersides of leaves and underbrush, the leech uses scent, temperature, and vibration to find a host. Often, it will fall onto the neck, shoulders, arms, or hands of hikers, where it withdraws blood using its front oral sucker. A tiger leech bite may be painful and can be difficult to heal.

Cruz drew back. “Sorry, buddy, I’m nobody’s dinner.”

The leech went out of focus as Cruz read the description in his lens again. *A tiger leech bite may be painful and can be difficult to heal.*

Interesting. Maybe Cruz couldn’t tell anyone about his regenerative ability, but nobody said he couldn’t do a few experiments on his own, right? He *was* an explorer, after all.

Cruz yanked off his left glove. Was he crazy to do this? Probably. But how else was he supposed to learn what his body was capable of? And what it wasn’t?

He spread his fingers and, in slow motion, put out his arm. The worm swayed toward him. Cruz’s hand began to tremble. He tried to steady it. The sucking mouth loomed closer, a tiny, eager 0. Cruz grimaced as he waited for the leech to strike.

One more inch . . .