

**Timid Pirate Publishing
Presents a Cobalt City Adventure:
A Biopunk Future by Nikki Burns**

For more Cobalt City stories, see timidpirate.com
Submit to our biopunk anthology by Dec 15, 2010

Tomorrow's Harvest

By Nikki Burns

For Jen

They marched across the screen like toy soldiers that had seen too many battles in the nursery. Their arms and shoulders sagged, faces devoid of any feeling that might lie buried under the mask of exhaustion. Stick arms. Stick legs. Turgid, hungry bellies. They didn't know where they were being herded to, and they didn't care.

It was just another two-bit story on the poor excuse for international news, scrawling across the television. Some small country in Africa, in South-East Asia, it didn't matter where. Drought gripped the land, crops were at an all-time low, warlords were hoarding what food was left, and the people were starving and so tired that it was even hard to be angry any more. Each death was an ending written in wailing relatives and black flies, but the book's cover never closed, for there were always more multitudes to be trampled upon, and more gluttonous bastards to take advantage of them.

Just a two-bit story, a blurb, a quick blip on the soulless television screen, one of hundreds like it that ran each year... yet special nonetheless. This image marched not only across the pixels of the television, not only across the fiber-optic cables stretched from country's end to country's end, and not only across the ragged landscape that the footage brought to life for those fortunate enough never to have seen it in person. It marched also across the surface of a mind. And in that mind, a seed was born – the germ of an idea, just a tiny infection that, properly nurtured, could grow into a whole, healthy new future.

A flash of bright light left the superheroes gaping unprofessionally, Stardust's high-powered laser burst still shimmering at just the point in midair where the perpetrator had held the improbable gadget before he disappeared. You'd think by now, thought the Huntsman, that we wouldn't be surprised by anything. That we'd come to

expect the unexpected and meet it poker-faced and somehow prepared for every contingency.

“Why forward?” demanded Wild Kat, ever analytical and insistent. Stardust’s final shot had busted the delicate display panel off of the cobbled-together gadget the Time Bandit had used to escape, and she scooped it up, the readout still bright. It showed a date; a date in the future. Stardust frowned and reached for the gadget, which she willingly relinquished. “It would have made more sense to go to the past,” she continued. “To change something back then to make conditions now more...” her nose, still strangely delicate even in feline form, wrinkled with annoyance, “more favorable.”

“He needed a component for a doomsday machine,” the Huntsman suggested. “Something that’s not so easy to get hold of now, but maybe the process for acquiring it is in the works. A new mine about to be opened? A new refinement technique being tested even now?”

Stardust nodded distractedly, then froze as the device in his hands began to flash ominously. “Uh, folks,” he said. The flashes accelerated wildly, emanating from a red light inside the thing. “It’s possible that this component was not meant to be... detached.”

The Huntsman grabbed it unceremoniously and threw it into the river. Before the others could remonstrate with him, a muffled thud and a bubble of water interrupting the current showed how timely his instincts had been.

“Great. Just great,” Wild Kat said disgustedly. Then she flashed an almost apologetic smile at the others. “Not your performance here,” she said, “although it’s lamentable that we didn’t catch him before he could go off to heaven knows where... I mean when. But we have a criminal who has wormed his way into the future, destroyed the device that presumably got him there, and is off on his merry way to destroy the world. All because his dog was run over by a truck, his girlfriend burned down his secret lair before leaving him for a wealthy doctor, and his country song about the whole thing was so bad that Leonard Nimoy’s recording of “Bilbo Baggins” outperformed it.”

“I didn’t know he’d written a song about it,” the Huntsman muttered.

“We need a time machine,” Stardust said, a schoolboy’s grin spreading across his face, his shiny metal shell glinting dramatically in the sunlight. Huntsman rolled his eyes.

The grin was undiminished. “I could build one,” Stardust said hopefully.

“I’ve got a better idea,” said Wild Kat. A cloud passed over the sun, and the Huntsman and Stardust’s exchanged knowing glances.

Of course she did.

It was a dream, really, that sparked it. The dreamer tossed and turned, exhausted but with a mind revving mercilessly under the burden of humanity’s troubles. Finally, reluctantly, the conscious mind relaxed, body preparing for sleep, muscles unwinding atop the comfortable mattress in the lonely apartment. And finally, the dreamer fell deep into REM sleep, where dreams are real and the subconscious triumphs every time.

The marching hordes were unified under a sickly green light. They no longer looked frail; their heads were held up, and none fell to die along the wayside. The flies would have to go unfed. A spark of life glimmered in the marchers’ eyes as the cameras panned over them, and the warlords were all in hiding. Instead of talking about slow and

inevitable starvation, the news anchor's cardboard voice droned on about Borlaug's dwarf wheat, of the flood-resistant rice revolution, of mass hypnosis and the potato success in Western China, and how it was all useless, useless now that the plants had aligned with the zombies and the world was coming to an end.

It should not have made sense, this unraveling defragmentation of the consciousness. But when the dreamer awoke and shook off the feeling of foreboding, the idea remained. "What if," whispered again and again in a mind that had more than enough knowledge and experience to be extremely dangerous in its field. Fateful words that have driven so many desperate souls toward rebellion "What if..."

From there it was only a matter of time. Time for research and experimentation, time for failures, progress, and finally a success. Finally a breath of fresh air, straight from the storm brewing west of tomorrow.

The machine was beautiful. Stardust admired it in spite of his disappointment. It was exactly the type of thing he would have built, he thought. Completely functional – well, it looked completely functional, you never really knew until you climbed in and twisted the dials – and with a sense of style that showed its maker was proud of his or her work. He twisted a little, gazing up at the rounded shell, the lit walkway, the sturdy metal clamps holding the frame firmly in place. His fingers itched to get at the controls.

"Esther, I know that you've been working on this thing for years, only to have the government and the council ban its use, and that's really not fair to you since they gave you the grant money for it. But the time-stream is already contaminated, and we need to use it to retrieve the... the contamination." Wild Kat's politeness was cool and diplomatic, and completely unnecessary. Esther was smiling eagerly.

"There's just one thing, Wild Kat," she said. With a sense of foreboding, Stardust knew exactly what the one thing would be before she said it.

"You can't go," said Wild Kat firmly.

Esther smiled. "You can't go without me," she said. "The machine has a retinal lock and a password only I and two other people know, and you don't know who they are. Besides, it would take your best man," she glanced at the Huntsman unthinkingly, and Stardust winced, "at least a week to learn to use the thing. For all you know, the perp will be there and back again by then, and what about this doomsday device that's all over the internet?"

"That doesn't make any sense," Wild Kat argued. "He could have come back before we left – he could come back any time at all, could have already arrived with all the components..."

"Now that's an argument that will take you in circles. Paradox! One-upmanship. He's travelling in time, Kat, and it's barely any time we have to catch him! What about it? Who's going to drive? Besides, I've been dying to take a couple of samples from the future to see how global warming and pollution levels progress – that's why I built this little beauty. I'll take exactly two steps out of the ship, whenever you go, snip a twig or two, and hop back in to wait for your team to drag back your quarry. It'll be up to your team to be responsible enough not to soil the time-stream unduly."

Wild Kat opened her mouth, but then smiled and shook her head. "I'm not going to win this one, am I?" she asked. "Fine. How many does that thing hold?"

"Four."

"Good. The Huntsman and Stardust will go with you. An extra, as you correctly surmised, will be taking up the empty seat on the ride back home. Does this thing move in space as well as time?"

"Only to certain pre-programmed locations that have been designated as time-spaces unlikely to be inhabited at preprogrammed moments of arrival, future or past," the scientist replied.

"Please tell me you don't have to dump my men off on a glacier or something..."

"Not at all. There are spaces that fit that description in every major city. You just have to know what you're looking for. Where are you going?"

There was a moment of silence as the heroes looked at each other.

"Was there an indication of location on that thing?" Wild Kat hissed. The others shook their heads.

"That's all right," Esther said, a smile curving her lips. "It most likely means that there weren't space-related settings. You'll want to transport as close to the place you lost him as you can. Just give me those coordinates again – I saw the newsreel, but longitude and latitude would be preferable..."

Wild Kat looked at the others. "Listen, I'll arrange the trip. You two have twenty minutes to get anything you will need to apprehend this asshole. We don't have a way to predict the circumstances you'll arrive in, so you'd better be prepared for anything."

Stardust heard the Huntsman sigh.

Trial and error, and patient perseverance, finally brought results. Lichen seemed such a good ground to start with, the natural symbiosis of chlorophyll-rich algae with fungal bodies that were unable to generate energy of their own, but provided structure, minerals, protection. But the rusts, crusts, and leaves were just too simplistic. That's why the symbiosis worked; it was a simple, paper-thin, utterly motionless little being that grew slowly and lived long. Human beings used too much energy to support a relationship like that; it would never compensate for the terrible hunger that gnawed daily at the unfortunate and downtrodden of the world.

Bacterial relationships and infections were more promising. Bacteria reproduced at a high rate, and there were several strains that lived in harmony with mammals, particularly humans. But ultimately, most of the bacteria that interact with human cells live deep within the system, not on the surface where chlorophyll could absorb sunlight. So adding the genetic coding for chlorophyll to the bacteria would just produce an unneeded mutation that would die out, its potential forever unrealized.

No. The genetic code of the human being itself must be altered to include the markers that would produce chlorophyll. No one person could possibly create an altered genetic profile for every human being on earth, so a vehicle was needed. And one was available, a simple being whose status even as a life form remained in question, but whose expertise in snipping and re-arranging cellular DNA was unquestionably superior. A virus. Yes. A virus could do it.

For weeks, the common cold seemed like the best possible option. It was not deadly, it spread easily and unstoppably, and there was no cure. Produce a viable virus that encoded healthy cells with DNA that would produce chlorophyll, and migrate to the skin, and produce energy... it didn't work. It didn't work at all. The cold virus was too weak, the body too capable of beating it. The level of contagion was ideal, but in the end, modified cells were wiped out by the body's immune system. Something more sinister had to be used. Something that replaced tissue and the new tissue survived.

One evening while deleting a particularly insidious marketing e-mail, epiphany struck. A cancer. Of course. Some known cancers were caused by viruses, and speculation that a larger percentage of cancers than anyone knew were caused by some type of infection was beginning to take hold. It made so much sense. A virus damages the DNA, but leaves the cell to reproduce itself, and viola! Tumor, malignancy. But great care would have to be taken. The disease – for the first time, disease became the formal expression for the brilliant idea – the disease must spread, must beat the body's immune system, and then must live in harmony with the body for the rest of their lives.

It was a thing of beauty, all right, Stardust thought. The controls gleamed at him suggestively, almost seductively, and his hands itched to run over them. Esther insisted that he sit next to her to learn the basics, just in case something went wrong. Her voice flowed over him as she explained the pre-launch sequence, and although his mind caught at the words and he knew they would be there later if he needed them, his attention was all on the machine.

The Huntsman lurked in his seat. It shouldn't have been possible, there in a lit and humming little control room, but he was who he was and he lurked in the exact manner that had always disquieted his peers. He might have been a statue; only his eyes were alive and aware..

"You're sure you have everything you need?" Wild Kat's voice carried through the speakers at the controls. "Restraints suited to the seat, for example?"

Stardust rolled his eyes. "Check," he said impatiently. Somehow he instantly knew Wild Kat's gaze had pierced the steel-alloy hull, and he couldn't help a light blush of guilt. "We're ready, Kat, really," he added reassuringly.

"Countdown," her coldly professional voice responded.

"Activation should be instant, Wild Kat. You won't see much, a slight ionization of the hull," Esther said, her elation barely suppressed.

"We went over this, Esther," the heroine's voice warmed slightly. "Don't worry, I won't interfere unless absolutely necessary. Now, let's stop wasting time. Countdown."

"Initializing in five... four... three... two... one..."

The Huntsman, sitting in the back, frowned. There was no physical sensation of movement, but his acutely-tuned senses were touched by a deep sense of unease, as though a reality he couldn't see was shifting around him. Then he noticed a pale glimmer spreading from the floor up the walls of the machine, washing over everything, including Stardust's back and Esther's side. He looked down and was unnerved to see the same phenomenon at his knees and rising, but physically he felt nothing.

There was a slight lurch, something like an elevator dropping briefly and unexpectedly except that it wasn't really directional. But his stomach took a moment to catch up to the rest of him. Then the glimmer washed over the ceiling and died.

Esther was shaking her head. "It should have been physically undetectable," she grumbled.

"Did something go wrong?" the Huntsman enquired.

"No," she replied, throwing a quick smile over her shoulder. "It's just... clumsy design. I'll have to realign a couple of things when I get back." She looked at Stardust. "Well?" she demanded.

"Well what?"

"When and where are we? You've got to know how to read this thing." She grinned. "In case the bad guys get me. Right?"

"Oh." He smiled disarmingly at her, and she frowned back, unfazed. "Well," he said hastily, "the dial matches the time coordinates we saw on the other device before it exploded. And your special coordinates are right on – we're at the northeastern corner of Cobalt City's airport, just eight blocks from the street where we ran the guy down. He should have gotten here a couple of days ago."

"And that means..." she arched an eyebrow.

"Uh..."

"We should get going," the Huntsman finished for him, rising and stepping toward the hatch. Esther flashed him a smile, and he thought she might have lowered an eyelid in a conspiratorial wink, but if so it had been... brief.

"Right!" Stardust leapt to his feet. "Open Sesame."

"Your wish is my command, oh master," Esther mocked him, tapping the release from the control panel about two inches from where he had been sitting. She winked again, this time emphatically. "As I said, I'll be taking about two steps..."

Her voice died as the hatch opened. The Huntsman paused, a breath of fresh, clean air washed over him and into the capsule, and they all realized instantly that the cycled air had been somewhat stale. His eyes widened.

"Esther," Stardust's voice behind him was calm, "can you please check your physical coordinates."

The Huntsman stepped forward cautiously, standing in the doorway and scanning their surroundings.

"The coordinates aren't wrong," Esther said in a small voice, "Unless the sensors are so messed up that they aren't working at all. This..." her voice grew impossibly smaller as another idyllic breeze caught at it, "this is the heart of Cobalt City."

Slowly she rose and went to stand behind the Huntsman. Stardust joined them, eyes narrowed. They were in a thicket of green, as far as the eye could see.

"It's the right place," Stardust's voice rattled a bit in his throat as he stared at the vista. "Look," he pointed. "The amphitheater. City Hall. The World's End bar at forty-second and Phinney should be just on that slope... we broke their windows three times in as many months a couple of raids ago..." he trailed off unbelievably.

They stared out the hatch for a few seconds before shaking themselves back to the current situation.

“I... I guess I wasn’t kidding when I said I wouldn’t go more than two steps out the capsule,” Esther said softly. “There’s a tree just out the door. It was... it was a restricted airport runway...”

“What do you need to do?” the Huntsman asked.

“Just clip a twig. You go find your combatant, okay?”

The superheroes shook off most of the eeriness and were on their way in minutes, but they didn’t get far before they heard a piercing scream from behind them. With barely a glance at one another, they changed course and ran back, inwardly cursing the delay and simultaneously hoping the cheeky scientist was all right.

They stopped short at the edge of the clearing where the capsule rested. Esther held up her hand in warning, and she shouted hoarsely, “Stay back.” There was blood everywhere, as though an inexpert gang member had tagged the area with an old spray can. The vibrant crimson fluid coated her face and shirt and hands, dripping off nearby leaves, and pooling at her feet.

Artificial life was first successfully created in single-cell form in California in the year 2010; a useless little thing playfully called Synthia. Instant controversy followed, but created no more than a blip in mainstream news. It was too futuristic; standard news audiences found the significance of the discovery difficult to grasp. But the scientific community knew. They knew that the forces that could be unleashed had vast potential, and must be harnessed carefully.

Tentative studies began amid the customary battles over patents and credit. What if they could create a bacterium that secreted useful compounds more efficiently than current biochemical processes? What if they could use genetic technology more effectively even than nanotechnology, a field still in its infancy? What if... what if... the thoughts dangled out there, and some were tinkered with, slowly, carefully. But it only took one scientist’s “what if,” a single sought-after solution to a global problem, for those forces to break upon the world like a cyclone-driven wave upon an unsuspecting shore.

What remained to accomplish became childishly simple, in its basic form. Take what is needed from the cold virus – that difficult-to-detect, easy-to-spread vitality. Take what is needed from a cancer-causing virus – the force that causes the appropriate cells to reproduce like mad under the radar of the immune system. Add what is needed from a vascular plant, the means to produce its own energy. Splice, splice, and splice again; re-write where needed, study the code for points of failure, and try again. Pop the artificial gene into the shell of a virus, test it again and again until the thing worked in the lab the way it was supposed to, infecting human cells and inserting the restructured DNA fragments into every single one....

The taste of success was sweet and strong as beautifully-aged wine. It had taken a great deal of time and effort to create, but once the virus was real and reproducible, only one thing remained: to predict the most efficient vector of infection. It must start with one person, of course, and travel the world. Door handles at airports – a sneeze on a plane, on a bus, in a circulated-air office building. It could be pandemic in a matter of weeks.

The stress of poisoning the needle against the wrist was tiny compared to the heady awareness of the great change that was about to happen. People would object to physically turning green, of course. Some might even be immune to the pathogen. But for the most part, humanity was doomed. Doomed never to experience the desperation of hunger again. Doomed to see children grow up healthy in a new era. Doomed, every single one of them, to be strong enough to take responsibility for their own lives, their communities, their nations – their future.

Watching the needle slip under the skin was easy, almost an out-of-body experience – no pain, just a tiny, swiftly-congealing imperfection giving physical form to a purely psychological euphoria. There would be no more hopeless news stories, no more toy soldiers marching across desiccated fields on the television screen. It was easy, too, to delete every detail of the biological, pathological, scientific research held hostage within the confines of the computer's hard drive. No more excuses from governments and international watch-groups as entire nations starved to death under their noses. And just to be safe, it was easier still to physically remove the motherboard and crush it into useless data-free shards under a fiery red stiletto. No more wide-eyed, blankly staring children accompanied by a holier-than-thou religious demand for money.

Delicately painted fingernails sifted through a little leather purse, checking for the cash, passport, identification, and all-important plane tickets – coach class, flight after flight stacked like a professionally marked deck. The acrid smell of gasoline tickled a delicate sneeze into life, and a quick detour for a Kleenex was necessary – although no soap would be needed on these hands. Then a final paragraph in the chapter of *Homo sapiens* flared to life as she tossed a lit match behind her, walking out of her quiet little lab and into her vision of utopia.

“Are you hurt?” the Huntsman's voice rasped, the only note of concern that slipped through his chronically impassive visage. She shook her head, droplets falling from her eyelashes and her nose.

“What happened?” Stardust asked.

“I... I'm not sure,” she replied slowly. Her chest heaved as she suppressed her panic. “I clipped a branch for collection, and it... it pulsed, like it was alive, and the tree moved...” her voice died and she shuddered. “This is not a tree,” she said, her voice shaking. “Trees don't have that kind of vascular system. Look at it.”

The branch she pointed to was clearly damaged. Even from where they stood, they could see the blood seething from within and pooling on the ground.

“It has a heartbeat,” she whispered. “Look, the flow isn't steady... it's being pumped.”

They were silent for a moment, looking at the tree. Buttressed roots branched from a pair of trunks, rather like a swamp mangrove. The limbs on top were thick with leaves, but the leaves seemed odd – more like a succulent than a tree. And the bark was thin, like a maple, and faded green, with striking vertical markings that could have been natural pores or could have been leaf scars, brown with age and healing.

“Stardust,” Esther’s voice broke the stillness, “please go into the capsule and get my microscope. It’s intended to look at the collection of particles incorporated into tree growth, and it will do. Put it down over there,” she pointed, “and back away.”

“Why?” the Huntsman asked as Stardust moved to comply, his suit shining in the sun. “What do you suspect?”

“I don’t really know. But I want to do a microscopic analysis of this blood, and the... the twig I removed.”

“It could be sap,” Stardust said unconvincingly as he crossed into the capsule.

“No,” they both replied behind him. They looked at each other. “Wrong consistency, and it’s warm,” Esther said, and the Huntsman added sharply, “I can smell it.”

It didn’t take long for Esther to complete her analysis. The microscope was efficient and powerful, having been built to help her scan and identify tiny particulate matter embedded in plant tissues. She paled and closed her eyes, facing the sun, sighing.

“Stardust,” she said. “Jacob, isn’t it?” The use of his given name was not a good sign. “Does that miracle suit of yours contain something that can irradiate both your suit and the Huntsman’s clothing, if he removes it?”

“Yes,” he replied.

“All right. Here’s what you’re going to do. First, get up on the hatch ramp. Irradiate your suit, head to toe, and make sure there’s no particulate matter stuck in the joints. Then, the Huntsman – I’m sorry, I don’t know your name – will join you, and remove his clothing, and you will irradiate that. Thoroughly. Please don’t be embarrassed, I won’t be watching. Then, you’ll drive the two of you home.”

They stared at her. “We’re not leaving you,” Stardust said. “Whatever it is can’t be that serious—”

“Yes. Yes, you are. And it is that serious.” Esther frowned. “Listen to me. Those aren’t trees, they are... or were... human beings. The composition of the blood matches. And there’s something more – I believe they are this way as a result of a pathogen.”

“Biological warfare?” whispered the Huntsman.

“I don’t know,” she snapped. “And stop asking questions, you don’t have time for it. I have been directly exposed to the pathogen – it got in my eyes, my mouth. You haven’t. We can’t carry it back with us. If these,” she waved at the thick trees around them, “are all people, the infection can’t have happened recently. They’re *all* at the airport. That means...”

“They were trying to flee. Perhaps a quarantine,” Stardust finished for her.

“Exactly. And between reaching the airport and not getting to board a plane...”

“The transition happened quickly. Oh. Oh, shit.”

“Listen, you can do something. You can go back and figure out where this pathogen is coming from, what the source is. Once you’re in the capsule, you can flush the air, and then see if you can hook up to a working satellite system. Get an orbital scan, figure out where the infection is most intense. You know what you’re looking for: intense, out-of-place urban greenery. And go back, and find this thing – before it is unleashed on Cobalt City. And the world.” Esther’s eyes were intense, and she stepped forward unthinkingly. “Please. It’s the only way to save them,” she gestured at the trees. “And me.”

And there was no way out of it; they did as she said. Esther didn't wait for them to leave. She marched into the city, hoping against hope that she was wrong, but unwilling to take the chance of infecting her entire past – and also unwilling to watch her only connection with home depart in a flash of iridescent temporal sparkles. The heroes, bent as always upon saving the world, followed her instructions exactly, leaving for their home-when, retreating from an enemy they were unequipped to fight.

Somewhere, a man screamed among the trees as his suddenly hardening fingers failed to control his handheld time-travelling gadget and the seams of his shoes began to split open..

Somewhere, a pair of red stilettos leaned comfortably against a trunk whose roots had slipped out of them while still mobile, to bury deeply into the earth they so loved.

Somewhere not too far away in space, but far enough in time, two superheroes struggled with the data they had collected from the future, already having forgotten that one of them had trampled through the alien greenery of the future and then into the time capsule to retrieve a microscope – prior to sterilizing his shoes.

And somewhere, some-when, something was caught in the warp and weft of a janitor's comfortably worn-out sneakers. It waited, wedged in the rubber sole, as he made his way out of the time-lab and toward home, crossing sidewalks, resting on a public transport, and finally trudging at last to the place where he was more than just a cleaner of toilets and scientific equipment. A little girl squealed and ran to him for a hug as his wife called, "Don't you dare track city dirt on my freshly cleaned floors!" And as he removed his sneakers, tapping the accumulated muck out on the side of the porch, a seed tumbled unnoticed onto the loamy and inviting soil of his front yard, as comfortable as any garden weed that had ever stumbled into a quiet little suburb of Cobalt City.

This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-nd/3.0/> or send a letter to Creative Commons, 171 Second Street, Suite 300, San Francisco, California, 94105, USA.