

**THE
PHAGES
OF
SIN**

**Elizabeth
Sourbut**

Part of

WRITING THE FUTURE

Writing the Future, the world's largest health short story prize, is brought to you by Kaleidoscope Health & Care.

Inspired by science fiction, entries considered how health and healthcare in the UK will look in the year 2100.

The prize was won by Elizabeth Ingram-Wallace with her story 'Opsnizing Dad', and was published along with the five other shortlisted stories in October 2017.

At a time of reflecting on where healthcare has been, a further set of longlisted stories was published in the summer of 2018 to coincide with the NHS's 70th birthday.

All of the published stories are available on the Kaleidoscope website, along with the option to buy a limited edition hard copy of the six shortlisted stories.

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The future is...
high-tech
and poverty
juxtaposed,
but we're all in
it together.

The clinic's sewage holding tank was nearly full. This infection was not kind to the gut. The roving bots had taken more than three hundred samples, but so far Jethro and the one pathologist he could afford to employ had failed to find the strain of bacteriophage they were looking for. The sewage tank was seething with bacteria, of course, and hence with the phages that fed upon them. But this latest infection was something new and as yet the phage specialised to feed upon it was proving coy. He knew they must be in there, and once found they could be cultured in the lab, and that would be the end of another life-threatening infection. But with his current antiquated equipment, the process was taking far too long.

He sighed. "I wish," he said to no-one in particular, "I *wish* this clinic had enough money to make bacteriophages into the real, mainstream therapy they should always have been."

Just then, his earphone buzzed. Margot, the financial wizard who was having to work reception today, sounded breathless, and the tiny image in his peripheral vision seemed flushed. "There's a glitterati here, and he's demanding to speak to you."

"A glitterati?" Momentarily, he was nonplussed. What would one of *them* be doing here, in his low-stratum clinic? Then he realised that Margot had not been working here long enough to know who this

particular glitterati must be. “Tell him to wait. I’ll come when I’ve finished here.”

Margot squeaked. “But he says it’s *urgent*. A matter of life and death.”

“So is this, as you well know.”

“Please. He’s most insistent.”

Jethro was puzzled. This was not typical behaviour. “All right. I’ll come up. Make him a coffee, strong, black, two sugars, and tell him I’ll be there in five minutes.”

“You *know* him?”

Jethro sighed. “Yes, I know him.”

He took the stairs up to reception two at a time. As he entered, he was irritated to find himself smoothing back his hair and squaring his shoulders, as though about to report to the Board.

Margot was pretending to work, and no doubt she had plenty to do. She was very well-connected and a genius at conjuring funding out of thin air, but even so the glitterati charisma seemed to be having its effect and every few moments her eyes strayed towards their guest. Jethro couldn’t really blame her. Few people got to meet a member of the glitterati, and they were spectacular in person.

Richard was a typical male example. Almost two metres tall, he had glossy black hair and perfectly

symmetrical features. His shoulders were broad, his hips narrow, and his limbs long and well-muscled. But what everyone noticed first, and could often scarcely see beyond, was the faint but clearly discernible haze of sentinel nanobots cocooning his entire body. No pathogen or poison could penetrate their protective blanket, and not a single DNA-bearing particle would ever escape into the surrounding air. Like all the glitterati, Richard was morbidly convinced that the entire world wanted his DNA to combine with their own, or to clone into the perfect offspring – even though he knew, better than most, that no clone would ever be an exact copy of himself. Jethro was living proof of that.

Once in his office, Jethro closed the door against Margot's long ears, and motioned Richard to a seat. "What do you want, Dad?" he said, more sharply than he had intended. "I'm very busy. We've got a killer infection here and I'm trying to get it under control. I haven't got time for your dramas."

Richard scowled, an expression that briefly broke the symmetry and made his face look much more like the one Jethro saw each morning in the mirror. Richard sat down, crossed his legs elegantly and motioned Jethro to his own seat behind the desk with long, perfectly manicured fingers.

"This isn't a drama, my boy," he said, his voice

more resonant than seemed quite reasonable. “I’m being blackmailed.”

Jethro realised he had obeyed the command to sit. “So get your security teams on it. Why come to me?”

Richard’s composure wavered, and just for a moment he looked deeply afraid. “They’ve hacked my medtech,” he whispered.

Jethro laughed. He couldn’t help it, the absurdity of the claim cut through all the subtle manipulation his father’s body language and pheromones were trying to work on him. “Impossible!”

“I thought so too, but I’ve had proof.”

“What possible proof – ?”

“Pain!” cried Richard dramatically, his voice suddenly redolent with suffering. “Illness! My God, boy, two days ago, I vomited.”

Jethro stared at his father, his mind working furiously. What Richard claimed was virtually impossible. The glitterati’s medtech was protected with the most secure quantum encryption in this, or any other, reality. The key was, quite literally, held in a different universe, and to find it by pure chance was impossible. There were only two explanations. His eyes narrowed.

“Either you’re trying to manipulate me for some reason, or you’ve been betrayed.”

“Betrayed,” said Richard, making a gesture as though snatching the word out of the air. “Yes, I believe so. That’s why I’ve come to you, my boy. You’re hardly the best with cutting-edge tech, but you are my own flesh and blood. I trust you.”

He looked pathetically at his son, and as his face crumpled in genuine fear, Jethro realised there was a third, and far more likely explanation.

“Or you could simply be getting old,” he said. “When were you born, Dad? 1964? That makes you 136 years old. You were one of the first glitterati. We simply don’t know how long an enhanced human can live. Maybe it’s not as long as we thought.”

“Old?” Richard laughed, revealing perfect white teeth. “Don’t be ridiculous! Look at me!” He spread his hands wide and puffed out his considerable chest.

“I better had,” said Jethro, ignoring the theatrics. “If you want me to help you, I’ll need a full list of all your enhancements and a thorough, hands-on physical exam.”

Richard rolled his eyes and a long list of enhancements began to scroll down Jethro’s cornea.

“It might take you a while to work through, so if you insist on such archaic methods as an actual exam, we might as well do it now.” He stripped and stood unselfconsciously naked while Jethro walked around him, eying him carefully. He looked like a man of 35, in almost perfect condition.

“You’ve put on a kilo or so,” said Jethro, surprised, “and your pecs have lost just a touch of definition.”

Richard nodded. “That was the first thing I noticed. My weight went up, and then I got this.”

His neural net was so advanced that he didn’t even need to blink, and the message was before Jethro’s eyes.

“Getting fat, old man? That’s not all we can do to you. A million Lunar or you’ll feel pain like you never imagined.” Details of a deposit account were attached.

Jethro blinked the message into memory. “A crank with a good eye. They saw you out and about and decided to take advantage.”

Richard shrugged. “That’s what I thought. My security tried to trace the message, but couldn’t. That in itself was astonishing. But then two days ago I developed arthritic pains in my right shoulder and both hands. They lasted several hours and then vanished again.” Jethro noticed Richard’s hands crabbing up by his sides as he remembered the experience. “You don’t remember your grandmother, of course, but she was crippled with arthritis before the end. It’s in our genome.”

“I know,” said Jethro who, at 58, was beginning to develop the condition himself. “I know exactly what my vulnerabilities are, and hence what yours will be if your medtech is compromised. Your genome is my genome, remember?”

Richard whimpered. “My father died of *cancer*,” he said. “Multiple myelomas of the bone marrow. They splintered his bones apart from the inside.”

“Pull yourself together!” said Jethro sharply. “The cancer genomes are all mapped, and T-cell therapy is a lot cheaper than your full glitterati medtech. Only the uninsured die of cancer these days.”

Richard sneered. “Like your clients here, I suppose.”

“Some of them, yes, but it’s not a problem you or I will ever have to face. Now, what else has happened to you, or are a few rheumatic twinges enough to bring you crying to me?”

As he spoke, he waved Richard over to the examination couch and, once he was lying down, began to run expert hands over the perfect body that was so like and yet so much more perfect than his own.

“There was another message,” said Richard. “They described exactly what they’d done and how it had probably made me feel. And this time they demanded two million Lunar to stop.”

“Could you raise that much?” asked Jethro, curious despite himself.

“It would take a few days, but yes. I could raise a lot more in Belt securities and Martian options if I had to, but I’m not going to cave to blackmail. Once you start paying out to scum like that, there’s no end to it.”

“True enough.” Jethro frowned as he continued the examination. Richard still looked fabulous, but to expert fingers he felt rather different. “Dad, how much of you is still original?”

“What does it matter?”

“There are issues with replacement tissue, and 3D-printed joints might be stronger, but they’re never a perfect match for the bone functionality. How many livers have you had now?”

“It’s in the list I sent you,” said Richard sulkily. “Anyway, they’re all lab grown from my own stem cells. There are no *ethical* issues involved.”

“That’s a matter of opinion,” said Jethro, who had had multiple grant applications for the development of his bacteriophage treatments turned down in favour of glitterati-related organ and tissue-replacement projects. “Is it true your last partner had a full-body transplant?”

Richard pulled a face. “I don’t want to talk about Radojka.”

“I tried to read up on her, but it was so hushed up I could barely get confirmation it had happened.”

“She didn’t want publicity,” said Richard. “Let her at least have some privacy. She can never leave her island again as it is.”

“She must have known that,” said Jethro. “But what I really wanted to know was, how far down the

throat was the join? Did she keep her human vocal chords?”

“Of course she did,” said Richard scornfully. “You don’t think she’d give up the opportunity to bitch about everything, do you? No, I expect she’s swinging through the trees right now complaining that she can’t find shoes to fit.”

“And you cut her off without a penny?”

“She doesn’t need my money.”

“Perhaps not, but it could be a motive. Have you thought about *who* might be making these threats?”

Richard rolled his eyes again and another list appeared before Jethro’s eyes. If anything, this was even longer than the list of enhancements. “My security has checked them all. *If* any of them is involved, they’ve managed to conceal any trace of it.”

Jethro finished his examination and turned away. “You can get dressed,” he said, scrolling thoughtfully through the list of enhancements as he returned to his desk. Most of his father’s joints and a few of his smaller bones had been replaced with 3D-printed duplicates, exactly the same shape and size, stronger and more durable than bone, but to Jethro’s mind not quite flexible or resilient enough. As well as three livers, he was on his fourth full set of teeth, second heart, third pancreas and second spleen. His prostate gland was long gone, and his hormones were now

regulated by a smart little pump linked to the nanobots that teemed through his blood. His immune system was almost non-existent, having had nothing to do for more than forty years, and his gut bacteria were severely compromised. Everything was being balanced in real-time by the medtech. If anything at all went wrong, Richard was vulnerable to everything from the common cold to severe, possibly fatal allergic reactions to almost anything. And there were subtle signs that his body was no longer reacting as quickly to the balancing act as it once had.

“Dad,” he said, “I really do think you’re getting old.”

Richard grunted, and Jethro thought he was angry. But a moment later, his father gave an ear-splitting scream and doubled over onto the floor. Jethro hurried to his side, but the glittering cloud of nano-sentinels around Richard’s body suddenly turned red and began to move much more quickly, forming a dense shield and emitting a threatening whine. Jethro felt a series of sharp pricks in his extended hand and quickly withdrew it.

Beyond his now impenetrable shield, Richard writhed and screamed, tearing at his own chest with clawlike fingers, drawing blood. Jethro blinked and winked, scrolling through reams of security protocols, searching for the emergency lines of code his father

updated once a year, the codes that would shut down the sentinels' protective features and allow him through.

After seconds that seemed like an eternity, he found them, spoke the string of numbers aloud, and the whine cut out as the sentinels turned silver once more and their motion slowed. At the same moment, Richard gave a gasping cough and slumped onto his back, the agony apparently over. Jethro dropped to his knees and put a hand on his father's sweating forehead. It was burning with a high fever.

Behind him, Margot's voice said: "Did you turn them off?"

"Yes. Get me my medkit, would you?"

"No need," she said, darted past him, and jabbed a needle into Richard's upper arm.

"What the hell – ?" Jethro stared up at her. "What was that?"

Margot ignored him. She knelt beside Richard, grabbed his jaw and turned his head towards her. "Do you recognise me, old man?" she demanded.

Richard groaned and seemed to be trying to focus his eyes. "I've never seen you before," he gasped.

"Now you look at my face?" She laughed harshly and leaned forward so the prostrate man was staring straight at her cleavage. He gave a sudden gasp and began to scabble away from her.

“It can’t be!”

“Nobody bothered to check what happened to Radojka’s body!” she exclaimed. “As though the body meant nothing and the self was all between the ears. Have you been back to see your shaggy beloved since she became a natural redhead?”

“Margot, what did you inject him with?” Jethro demanded. He didn’t know what she was talking about, but he realised it couldn’t be good for Richard.

“A neat solution of our nasty new infection.” She rocked back on her heels. “He wasn’t going to pay up, so I thought a more direct approach might work.” She glared at Richard. “If we don’t find the bacteriophage we need, you’re going to die right alongside all the paupers in this clinic. I spent my life trying to raise money from tightwads like you for research that would really make a difference to billions of people. Then a bunch of glitterati-employed goons shattered every bone in my body. Only a full-body transplant could save me, and luckily Radojka had just thrown one away.”

“That’s her,” gasped Richard. “I’d know her anywhere.”

“Do you have any idea how much she hated you by the end?”

“How can you know that?”

“I can *feel* it! I have her body. Almost more than myself, I’m *her* now.”

“Margot,” said Jethro softly. “What have you done?”

She looked at him across the godlike body of her victim and her eyes softened. “I did it for you,” she said. “Can you imagine how much good you could do with a million or two Lunar? After more than a century, bacteriophages could finally become a mainstream therapy. Wasn’t it the right thing to do?”

“But how did you hack my medtech? I changed my codes, all of them, after we split up.”

“I’ve never spoken to what’s left of Radojka,” said Margot. “Anyway, I’m sure she’s more orangutan than human now. I got the codes from Jethro’s files.”

“But they’re all encrypted!” cried Jethro.

“Oh, love,” she said. “You’re a wonderful doctor, but you should never try to do your own IT. I’m a *professional*. All I needed was your voice to turn off his physical defences. Which you obligingly just did.”

She glared at Richard. “You interrupted Jethro in some very important work when you came here today. But I control your medtech now, which means your only hope is Jethro’s bacteriophage. If you’d given the money I asked for, nobody would be suffering. I think you’ll find that little puke the other day was nothing compared to what’s about to happen.”

White-faced, Richard rolled on his side and threw up onto the floor, the contents of his stomach

spilling over Jethro's shoes as he retched and retched. Towards the end, there were streaks of blood amongst the thin, vile-smelling bile. When he could finally speak again, he gasped: "Do whatever she says. I'll give you all the money you need. Just *cure me!*"

Jethro was almost paralysed in horror. "I probably can't do it in time," he said. "If he dies, his money goes with him. He hasn't left it to me."

"I'll keep him alive long enough," said Margot. "Just do your work."

Numbly, Jethro stumbled back to the lab. He looked around at the antiquated machinery which he had never been able to afford to upgrade and remembered this morning's wish for enough money. Now it looked as though it was to be granted, at the price of his own father's suffering.

Trying to block out all thought of what had just happened, he turned again to his samples and began to hunt, methodically and scientifically, for the bacteriophage that could save his patients' lives.

About the author

Elizabeth Sourbut lives in Yorkshire. She works as a writer and editor, and has published several SF short stories and dozens of book reviews. She is fascinated by difference and diversity and enjoys speculating on how social relations may change in the future. When not writing, she spends her time travelling the world and ballroom dancing.

Inspiration

I wrote this story because bacteriophage technology has been around for decades but seems never to have been properly funded. It could be one answer to the antibiotics crisis and I wanted to help raise awareness of its existence.

Writing the future

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