

WELCOME BACK

Nima Ghadiri

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.

Find out more at

kaleidoscope.healthcare/health2100

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About Kaleidoscope Health & Care

Kaleidoscope brings people together to improve health and care.

We find new ways to overcome old barriers. We enable constructive conversations on difficult topics, using inspiring events to encourage clarity of purpose and rigorous problem-solving. Our approach to collaboration is systematic, evidence-based and cost-effective.

Our services enable you to collaborate with rigour. We provide everything required to support effective connections, conversations and networks, from design to management to events. We provide consultancy to help you resolve complex issues through practical, sustainable changes.

As a not-for-profit organisation, we seek to work with our clients in a spirit of kindness, trust, and openness. Our multi-disciplinary team includes clinicians, policy makers, managers, specialists in communication and digital technology, and more.

Could we help you to solve your problems? If so, get in touch, we'd love to hear from you.

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**The future is...
a veiled
labyrinth**

Dear Sir/Madam,

We at CryPro Corporation hope that your thawing experience has been endurable, and that you have had the chance to examine the information pack which was delivered to your InPod earlier today. This has been provided in several holographic and print formats for your convenience.

You will find that the world has changed considerably since you elected to be frozen seven decades ago, and although there has been no prior requirement to awaken our preserved citizens, it is with great optimism that our nation's Grand Artificial Intelligence has decided to restore a select group in order to offer a more classical approach to our current challenges, and hopefully the key to a prosperous future.

Given your background, you have been allocated a support role in our revolutionary healthcare thinktank, the first in twenty years to re-introduce humans to policy-making. Your first session starts tomorrow, but I have included a helpful "A to Z of healthcare" e-pamphlet below, which was written by one of your contemporaries, together with a tray of MindSweets for your pleasure.

Once again, please do not hesitate to enquire if you have any problems with your adjustment to the 22nd century.

Yours Synthetically,

Trelton Matthew

Liaison Officer, Human Insight Project (HIP)

A to Z of Healthcare

Hello fellow defrosted human. My name is Derek, and I believe I worked as a lead paramedic in my own time, but my memory has faded a lot since they woke me up a few years ago. I'm about to be transferred away somewhere.... I've written a brief A to Z which the lovely synthetic administrators have deemed acceptable for sharing with others. Hope this brings you up to speed. Good luck.

**Derek ,
Paramedic**

Artificial Intelligence

Artificial intelligences replaced most human doctors and nurses in the first half of the 21st century. With everything from tax rebates to your social media profile being absorbed into a huge medical huge database courtesy of the OpenMedicine Act of 2031, machine-learning systems were given huge datasets to provide insights into diagnosis and treatment at a fraction of the time and cost of non-synthetic doctors.

You will find that leaders of industry, business and politics are, in conjunction with their workers, all synthetic. However, you will find that in our field there

are still a few vintage flesh-and-blood practitioners. Even our finest emotional algorithms still haven't perfected the empathic bond which exists during times of extreme stress or end-of-life care situations.

Bionics

Nevertheless, even our non-synthetic colleagues are likely to sport one of the many neural prostheses which were developed in the early 2040s. Human augmentation technologies became so ubiquitous that it would be impossible to find a non-synthetic doctor without a hippocampal implant or a 20/1 lens.

Mankind suffered greatly during the 2020s Information Wars. Subsequently, necessary advances in bionic limbs allowed paraplegics and amputees to return to, or even improve, their pre-injury bodies. For a while, it also became fashionable to attach larger and additional limbs to the body. Indeed, if you want an old-fashioned haircut, visit Neolo's barber next to the HIP building and marvel at his 12 arms.

Colonies

Colonising and harvesting Mars was vital in providing essential resources at a time when the Earth's supplies of raw materials (particularly silicon and aluminium) were dwindling. Unfortunately, early explorations of the

Red Planet were fraught with challenges. The United Kingdom's Mars colony still struggles with frequent outbreaks of Pandoravirus, a particularly large and vicious virus which doesn't seem to respect mankind's endeavours.

Data Security

As you know, mass loss of security and privacy prompted the 2020s Information Wars. Hacking of brain implants around the world started a war of attrition between shadowy data agencies and public organisations. Ultimately, the battle for confidentiality was lost, and therefore it remains the most valuable luxury for mankind at present.

Do not be alarmed that your full medical and psychological profile are accessible for everyone in the United Kingdom to appraise.

Eugenics

There have been many so-called "Eugenics Wars" as human genetic engineering laws have varied extensively from nation to nation. In our country, the gamble of creating the next Speedball megastar has been replicated ad nauseam. Rarely, success has been found (as you can see by the numerous Bodini and Garrik holostatues around the building) but the

potential of designing giant muscles and extreme brain capacity before birth is still outweighed by the numerous failed “experiments” who suffer from unpredictable complications of our gambling with DNA.

Food

I’m afraid that you will find the primeval contentment from a fine meal no longer exists. Synthetic satiety hormones such as NeoLeptin mean that we only eat what we need to, and our meal-orbs are tailored exactly to our physiological profile. Nutritional deficiency is unfathomable.

There remains a small enclave in the Isle of Skye where NeoLeptin is not injected into the water supply and you can enjoy ancient meals, such as Bread and Melon, on plates with vintage cutlery. However, access to this is restricted to designated officials.

Global Warming

The global warming disaster spared us in comparison with most other dominions. Nonetheless, the variability in the droughts and extreme precipitation caused frequent problems with dehydration, water-borne diseases and particularly psychological problems. With the gradual replacement of our population by

synthetic lifeforms, these problems have diminished a little over the last few decades. However, our health infrastructure still struggles to cope after a period of flash-floods or extreme heatwaves.

Holosuite

The holosuite provides a life-realistic experience which is crucial for both rehabilitation and recreation. For example, the oldest of our baby boomer generation are now approaching 170 years of age, courtesy of the latest Telomerase supplements. Despite the finest bionics, they might struggle to compete in Speedball as they did before. The holosuite allows them to easily and safely control the environment around themselves, self-augmenting to compete as Montez in the 2086 final or even go fishing for Silver Trout in Aylesbury Harbour.

You will find that the holosuite may provide the bastion for your psychological wellbeing, in a potentially otherwise confined environment.

Insurance

Despite a long and brave battle, the final bastions of universalized healthcare were eventually liquefied in 2036. Thereafter a horde of profiteers, some less scrupulous than others, sought to convince the population

that their product was the greatest. Those who fell through the new cracks of this Randian dream, many of them vulnerable or elderly, are now forgotten history.

Now, insurance is a necessity for all, with coloured tiers displayed on your Holo-Ident. I would advise upgrading from the base level to at least alpha-2, as you get free haircuts at Neolo's.

“Jenesis”

New synthetic cannabinoids became easier to mass-produce and created a generation of addicts in the early 2030s as successive governments were unable to clamp down on 3D-printed drugs. However, it was a new form of psychedelic drug called “Jenesis” which has been an obstacle for the last three decades. The merciless combination of time-altering effects, realistic hallucinations and consistent serotonin release has proven inescapable for many. As the formula is simple and reproducible, there has been no effective way to regulate production and consumption.

Jenesis users are often sent to the Sanctuary, a peaceful haven to allow them to re-connect with reality. Unfortunately, the long-term effects of this drug are such that those who use it are never sure whether they are in reality or having a hallucination, an effect which persists many years after taking their last dose. Please avoid it at all costs.

Kinesis

As travel is now immediate, the risk of body atrophy due to lack of movement remains a possibility, albeit rare due to the many regenerating nanomedicines available. Nevertheless, in the far colonies of Mars and Ganymede where access to medicines can be intermittent, epidemics of Obesity can occur.

Learning

Machine learning and open access to data have ensured that our synthetic colleagues hold an encyclopaedic level of knowledge which can be increased instantly with new breakthroughs in medicine and nursing, and delivered to their brainchips. For us lesser beings, there are various tools to keep us up to speed. Your holosuite provides educational programs which are tailored to your own learning style, so that you can swiftly learn about our new understanding of diseases and therapeutic options. The holosuite periodically measures your mental stamina levels and will give you a shot of Nootropic or stimulant to keep you alert.

Mental Health

Despite mastery over diseases of the body, managing conditions of the mind remains a challenge. Although the most severe psychiatric illnesses are now easily treated with safe medications, psychological problems

endure amongst our population. Depression and anxiety are compounded by the matters of boredom and affluenza for some, and unpredictability of life for others. The effects of climate change and availability of mind-altering drugs are also contributory factors.

Surprisingly, even our synthetic compatriots are prone to bouts of unexplained depression or anger. Thorough analysis of their personality algorithms has yielded no explanation as to why this might be.

If you find yourself feeling or anxious then I would advise booking yourself some time in the Holo-suite. Our counsellors (both synthetic and non-synthetic) are also available at all times.

Nanomedicine

Nanomedicines are tiny drugs or devices which can be implanted or injected, and can be programmed for testing uses, specific tissue building and regeneration, drug delivery and DNA alterations. They have rendered most traditional diseases obsolete, including cancer and all Earth-borne infectious diseases.

You will find a comprehensive tailored nano-package will be delivered to you over the next day. Don't be alarmed about the proposed changes of your DNA, which will remove your susceptibility to disease. I signed the consent holo-form and was delighted when my psoriasis disappeared within an hour.

Oxygen

After an era of immense over-consumption between 2040-2060, atmospheric Oxygen is now the most closely-monitored resource on Earth. As well as the effects of tissue hypoxia, the domino effect of dwindling oxygen on the ecosystem precipitated a number of catastrophes in the 2070s. We are still in a period of rationing, and your oxygen consumption is closely monitored, with an appropriate amount made available for your daily usage. Extra Oxygen is available at a cost or on higher-tier insurance levels.

Parentism

The traditional idea of the family unit as consisting of parents and children no longer exists, since incubation pods replaced the human womb in 2055, and nurseries ensured that infants received bespoke evidence-based care in their first few years of life. However, a recent movement of “Parentists” attribute the loss of a defined family structure to the recent increase in psychological problems amongst our non-synthetic population. Although I remember my mother and father well, I am not able to comment on this.

Quality

There is a strong emphasis on healthcare quality in 2100, with a code which includes no needless pain, suffering or death, no waiting and no waste. The healthcare professionals here, be they human or synthetic, work to ensure that all those insured at alpha-4 or above are guaranteed compliance with this code.

Revival

Controversial research into revival of the deceased prompted numerous attempts to bring back our most decorated scientists and Speedball stars. All non-synthetics desiring potential revival have been cryogenically frozen as soon as possible after death for the last 25 years. However, complete success in neuronal regeneration and tissue regeneration is rare and in most cases the revived individual does not resemble the same person in his previous life. Problems with memory formation and recollection are also prevalent, although new therapeutic options are emerging to deal with this.

Superintelligence

The culmination of our endeavour in artificial intelligence has been the development of artificial superintelligences, which can be considered as a separate species to

conventional individual synthetic beings and are able to evolve at a tremendous pace to break through traditional cognitive limitations. At this stage, implementing superintelligences in healthcare and other fields has been cautiously slow, due to the potential societal impact of rendering us obsolete and threatening human survival. However, the work in motivational and capability control is progressing and we are on the verge of introducing new superintelligences to work alongside and complement us. These are, indeed, exciting times...

Transhumanism

Transhumanism is an ever-evolving concept defined by the development and enhancement of human beings, such that we become improved as individuals and collectively. With the advent of increasingly advanced synthetic beings, this is now a necessity to prevent our extinction. We are in the midst of a race to obtain new abilities through DNA manipulation and experimentation. You may find an invitation to the upcoming conference on telepathy and prognostication at the University of Southend.

Universal Healthcare

It is not possible to quantify how many millions may have suffered or died due to loss of access to healthcare amongst the most vulnerable, and I have

been asked not to dwell on this topic. The emphasis on freedom of choice and self-ownership have defined healthcare options, although there are increasing calls for a new tactic, hence why you are here.

Visions

Predicting the future of healthcare will be a challenge, despite the finest algorithms in existence. We hope that the challenges of dwindling resources and further climate change can be met by pragmatic approaches to health but unexpected challenges may always arise. That is why we are investing in a “Vision” programme for humans who show signs of precognitive abilities. There are those who say that this is a pseudoscience, but I believe that futuresight remains a potential skill which is exclusive to us non-synthetic organisms, and we need to find and hone this ability.

Waste

Reduction and optimisation of waste is crucial in our health service. Our population steadily increased over the last century due to increased longevity, despite the challenges of climate change and war. Unfortunately, uncontrolled consumption led to a waste epidemic which when unmanageable temporarily produced the environment for the return

of some though-to-be-extinct diseases such as Plague and Hepatitis. This stimulated the need for waste optimization. As our population has become increasingly replaced by synthetic beings, our waste production has steadily decreased.

Youth

The obsession with maintaining and regaining youth has persisted since the Babylonian epic “Gilgamesh”. Cocktails which include skin regenerators and telomerase activators are the greatest use of disposable income, and the battle against senescence is one of the greatest challenges facing scientists today.

Zzzzz

Your sleep time is critical for personal optimization, and you will find that sleeping in 2100 is a very different experience the first time the doors of your Somnus open. As you enter, you will receive a designed blend of hypnotics and nootropics to ensure a precise duration of sleep in a liquid bed which regenerates your body. Your choice of beta-wave audio programming will ensure that you learn the language or enjoy the dream of your choice over the five hours of designated sleep.

About the author

I am an NHS eye doctor and technophile who has always been absorbed by science fiction. So many medical tools which are now routine were once buried within the realms of science fiction, and the medium has an important role to play as we debate the future of healthcare. As a doctor, I dream of the Utopian portrayal in Star Trek whereby medical treatment is universal and readily available for all. Sharing stories and ideas with others is the first step to conceiving our impossible instruments of the future.

Inspiration

Artificial intelligence is developing at a pace which means that synthetic lifeforms are not too far away. I am fascinated by what will become of our relationships with them, their roles in society and potential conflict with us. This “Guide to the year 2100” is written for a cryogenically-frozen human who has been brought back to help a world over-reliant on synthetic lifeforms.

Writing the future

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