Press release: Top computer scientist chosen to lead National Centre for Computing Education

One of Britain's leading computer scientists has been appointed as chair of the new National Centre for Computing Education (NCCE), it can be announced today.

Simon Peyton Jones of Microsoft Research has achieved worldwide recognition for his work on programming language among other things and will now lead the work of the centre as it improves the teaching of computing and drives up participation in computer science.

Professor Peyton Jones said:

> The National Centre offers a once-in-a-generation opportunity to firmly establish computer science as a foundational subject discipline that will enable all our young people to be active participants in the complex digital world that surrounds them.
>
> I am delighted to have a role in translating the big vision of the new computing curriculum into a vibrant reality in every classroom in the country.
>
> As the chair of the National Centre for Computing Education, Professor Peyton Jones will uphold the integrity of computing as an academic discipline across all the resources, guidance and professional development for teachers that the centre provides.

School Standards Minister Nick Gibb said:

> This appointment reflects the Government's determination to make sure pupils are computer literate and versed in the fundamentals of computer science and computer programming.
>
> Professor Peyton Jones brings a wealth of experience and expertise to this role. This will be vital in making sure the centre, which is backed by a consortium made up of some of the country's most accomplished tech organisations, is able to train teachers in the latest digital skills.

The National Centre is working with schools across England to improve teaching of computing and to drive up participation in computer science at GCSE and A-Level.

A consortium made up of STEM Learning, British Computer Society (BCS) and the Raspberry Pi Foundation are delivering the work of the NCCE, backed by up to £84 million of government funding.

The National Centre will operate virtually through a national network of up to 40 school-led Computing Hubs to provide training and resources to primary and secondary schools, and an intensive training programme for secondary teachers without a post A-Level qualification in computer science. The centre will also develop an A level programme to better prepare A level students for further study and employment in digital roles.

The National Centre will work with the University of Cambridge, with a further £1 million investment from Google.

Notes to editors:

Professor Peyton Jones is a Fellow of the Royal Society. He is a Distinguished Fellow of the BCS, granted for his work to advance the development of computer science education in the UK. He is an Honorary Professor of the Computing Science Department at Glasgow University, where he was a professor in the 1990s, and he is currently a Principal Researcher at Microsoft Research.

He is also chair of Computing at School, the grassroots organisation that was at the centre of the 2014 reform of the computing curriculum, which has a membership of over 30,000 computing teachers and academics.

Press release: Foreign Secretary Statement on the fifth anniversary of the illegal annexation of Crimea

Five years ago, Russia illegally annexed the peninsula of Crimea in a blatant land grab from Ukraine.

Press release: Foreign Secretary Statement on the fifth anniversary of

the illegal annexation of Crimea

Russia seized key Parliamentary and Police buildings from the Ukrainian authorities and then ran a sham referendum in an attempt to legitimise its actions.

Once President Putin signed an illegal decree to absorb Crimea into Russia, the Russian authorities ran illegitimate ‘elections’ and imposed Russian citizenship, Russian law and military conscription on everyone living in this part of Ukraine.

Foreign Secretary Jeremy Hunt said:

> I condemn the illegal annexation of the Autonomous Republic of Crimea and the city of Sevastopol, Ukraine, five years ago. The UK will never recognise Russia’s illegal annexation of Crimea and we call on Russia to end their illegitimate control of the peninsula and their attempts to redraw the boundaries of Europe. Russia’s pattern of unacceptable behaviour has continued with their supply of weapons and personnel to the conflict it initiated in eastern Ukraine, the illegal construction of a bridge connecting mainland Russia with Crimea, and their relentless attempts to monopolise the Kerch Strait in a campaign intended to undermine Ukraine’s economy and demoralise its citizens.
>
> Russia continues to commit human rights violations beyond its borders by systematically persecuting those who voice their opposition to the illegal annexation of Crimea. I call for the immediate release of all Ukrainian political prisoners, who are being held in Crimea and Russia without access to international monitoring organisations or essential medical treatment. Russia must also immediately release the 24 Ukrainian servicemen, who were detained whilst lawfully attempting to sail through the Kerch Strait.
>
> We join NATO and the EU in condemning Russia’s unjustified use of force on Ukrainian vessels in November last year. The UK, along with our EU and G7 partners, remains unwavering in our support for Ukraine’s sovereignty and territorial integrity. Crimea is Ukraine.

Further information

Speech: I believe in the power of technology to make lives better

I want to talk this morning about the future of healthcare.

And I want to talk about technology.

I am well known as a technology enthusiast – and not just because I have my own app.

Since I have been Health Secretary, I have put shoulder to the wheel to get out-of-date technology, which is no longer fit for purpose, like fax machines and pagers, out of the NHS – and get the best new technology in.

We may be making some progress – and I am determined to continue.

Today, I want to talk about why.

Why do I care about the best technology in healthcare?

Because I believe in the power of technology to make human lives better.

Why should anyone care about the best technology in healthcare? Because to care about technology is to care about people.

People. That's always been what all the tech, all the scientific developments and healthcare innovation is all about.

And there are some naysayers.

But Britain has always been on the cutting edge – driven by a desire to develop new ways to improve lives and save lives.

Vaccination, immunisation, IVF – pioneered by British scientists with a mission to save lives, improve lives, give the gift of life itself.

Yet all those vital technologies we take for granted now were once scary and unknown.

Take IVF – first conceived at the Royal Oldham Hospital.

It's become a routine medical practice within my lifetime, but not that long ago serious scientists were saying it couldn't be done, or shouldn't be done.

More than 8 million children have been born with the help of IVF.

Every one of us knows some of the millions of parents who have experienced the joy and miracle of parenthood that they wouldn't have otherwise known. I know some of those parents and I have seen the joy it brings.

All because of the genius of human ingenuity, and pursuit of innovation, in a

mission to make life better for people who couldn’t conceive children on their own.

All because someone cared enough to do something about it.

It’s my firm belief that robotics, personalised medicines, artificial Intelligence and genomic sequencing will all, in time, come to be considered a routine, everyday part of healthcare.

And yes, there are important ethical questions.

And yes, we must answer these.

And yes, we must take people with us.

But no, we must not stop the clock, and reject technology because it’s too controversial or too hard.

I believe we must make the case for tech in a humane, compassionate, caring way.

Listening to people’s fears, not dismissing them.

I believe in the innate and instinctive desire in all of us to care for those we love. And all this new health technology has the same simple quest to do just that: to help care for each other.

Helping to heal the nation, and we could probably all do with a little healing right now.

Because the future, the unknown, provokes strong emotions in people: excitement, curiosity, and of course fear.

Unchallenged, fear can triumph over reason, particularly when it comes to tech.

And from Malthus on, most of those apocalyptic, prophets of doom turn out be spectacularly wrong. And often not because the premise of the concern is wrong: Malthus was right to worry how we’d feed ourselves.

But wrong because they ignore the capacity of human ingenuity to shape technological development: to bend the power of science to human ends.

The naysayers, they say to me:

> Stop worrying about technology: there’s a shortage of doctors.

Or:

> This technology isn’t perfect – we shouldn’t use it.

And the thing is, the premise of these accusations is true. We do need more doctors, and the technology isn't perfect.

But the response, to both of these challenges, is to make the technology better, not to reject it altogether, in a spirit of rational enquiry and scientific progress.

The Spectator is part of a fine, enlightenment, intellectual tradition that has promoted this way of thinking for centuries.

This is what the Spectator had to say in 1871, in a scathing piece attacking Gladstone's government for dismissing vaccination rather than encouraging it:

> If vaccination were to be abandoned, the result would be that smallpox would become not an epidemic, but a pestilence, spreading infection far and wide, fatal in the majority of cases, inflicting permanent injuries on the survivors….
>
> This is the teaching of medical science, and against this we are asked to put the 'conscientious belief' of a few people that medical science is either mistaken or dishonest.

It could almost have been written today.

And I love this example from the Spectator archives, a leader column from 2 July 1948, 3 days before the NHS was born:

> There are too few doctors for the anticipated demand, there are far too few nurses, [the majority of dentists appear for the moment to be standing aloof from the scheme]….
>
> But it is undoubtedly right to get the health service started. Whenever it was started it would be imperfect, and need to be amended and improved in the light of experience…. But the nation will soon possess the best medical service in the world.

Quite right.

Progress, by its nature, is never perfect. It's piecemeal, it's hard fought, it's not the easy promises of populism. The NHS didn't happen overnight with a click of the fingers to meet every need and fulfil every expectation – as some people would have you believe.

It took years of painstaking preparations, tortuous negotiations, work to drive it forward in government, first by Conservative and then Labour ministers.

Progress means we keep going, never settling, always aiming higher, always trying to make things better.

Diagnose, test, solve, repeat.

Testing hypothesis against objective fact, with an optimistic yet sceptical mind.

We should look to the great Canadian ice skater Wayne Gretzky for inspiration on this, because the secret of Gretzy's success was not going to where the puck is, but "where the puck is going".

And it's this spirit of continuous improvement I believe we need in the NHS today.

The NHS has always been at its best when it's looked to the future and embraced new technology.

Because of the decisions this Conservative government has taken – £34 billion extra a year, the longest and largest cash settlement in its history – the NHS can plan for the future with the confidence, and technology, that it needs.

So what's 2030 going to look like?

Well, it's probably not going to be flying cars and hoverboards – though after last week, who am I to predict the future?

But I think we can be pretty certain that the digital revolution that has transformed the way we shop, eat, bank, travel, read, watch, and even find love, is going to have arrived in our hospitals and GP surgeries.

Robotic surgery that's less invasive, faster and with fewer errors.

There's the game-changing potential of AI and genomics to predict which of us are susceptible to which illnesses, diagnose those already ill faster, and develop tailor-made treatments to get us back to health.

But it's not just about this cutting-edge technology. It's about getting the basics right.

You can file for divorce online – and a depressing 13 did on Christmas Day – yet not everywhere can you book a GP online.

Even using existing technology we can do so much more:

- new software to support remote monitoring of vulnerable and elderly people in their own homes
- video consultations – so more accessible and flexible appointments
- wearables that track vital signs and gently motivate us towards healthier lifestyles

Now, some may argue that we need to hold back this tide. That we should resist and fight back.

There's even a modern-day King Canute in the form of Jeremy Corbyn, who wants

to tax robots.

And I understand the impulses behind this view. It even turns out one of my ancestors was a leading, loom-smashing Luddite.

Yet, history has shown us time and again, it’s better to shape change than to fight it.

It’s better to be in favour of the future than live in fear of it.

And when I am out in hospitals and talking to NHS teams across the country, I also know that people – patients and staff – are enthusiastic to embrace technology.

They increasingly expect it to be there.

Technology is across all other parts of their lives.

They want to know why their mother can’t get the best cancer treatment.

They want to know why their child has to wait longer to be diagnosed.

Why does their GP need to wait for a letter in the post from their specialist when every other part of their life is managed online?

So this is how we’re going to do it: there’s 3 parts to this approach:

First: prediction prevention.

We’re going to use technology to help us identify those of us who are at higher risk of developing a disease, and then use existing medicine and advice to help prevent us from becoming ill in the first place.

Second: driving innovation across the NHS.

So we’re introducing NHSX, a brand new, specialist bridge between the worlds of healthcare and technology.

It’s going to work with industry and in-house teams to create a culture of innovation and experimentation within the NHS so proven, safe, tested existing technology spreads faster across the system – and we break up some of the silos that slow down progress.

We’ll ensure we keep our first-ranked place at the forefront of the global debate around genomics so we can create an ethical framework to ensure this exciting new tech is developed responsibly.

Later this week, we will celebrate the brilliant 100,000 Genomes Project, which has harnessed whole genome sequencing to discover new diagnoses and better treatments for patients with rare diseases and cancer.

We’re world-leaders, but we’re not resting on our laurels.

We’re going further with an ambitious target of sequencing one million whole

genomes.

It’s not just about these 2 areas. Across the board the NHS needs a culture of seeking out and sucking in the best innovations on the planet.

We’ve got to stay at the cutting edge.

Third, and this is the most important for me: people.

The reason I care about tech is because I care about people.

We should never lose sight of that when we’re talking about the latest gadgets and scientific breakthroughs.

The only reason tech and innovation matters is because people matter.

Getting it right in the NHS means your child, your partner, your parents, have a better chance of survival.

But there is another important – and often missed – benefit to good technology.

The best technology can also help doctors, the nurses, the paramedics and healthcare staff, who make the NHS what it is.

The right tech makes their lives easier. In the words of Eric Topol: it gives back the gift of time.

Because no robot is ever going to replicate human empathy.

No machine can replace what makes us human – the caring.

So the great big team that is the NHS – everyone in every part of the NHS – will need to be a part of this new era in NHS technology, and that involves training.

Because by embracing and shaping technology, we can harness progress to help people.

And I want to end on this point of progress.

Barack Obama said:

> If you had to choose a moment in history to be born, and you did not know who you would be – whether you were going to be born into a wealthy family or a poor family, what country you’d be born in, whether you were going to be a man or a woman – if you have to choose blindly what moment you’d want to be born, you’d choose now.

Right now is the best time ever to be alive.

Just down the road from here was the Central London Recruiting Depot during

the First World War.

Like many of us, my great-grandfather served in that war.

He had served in the Boer War and in 1914 signed up, and spent the first 3 years training troops here in Blighty.

When we got short on men, he was sent out to France in March 1917, and in October he was injured when a shell exploded next to him and he was sent back to recuperate.

But we're made of determined stuff in my family.

In 4 months he was patched up, sent out again, and back into the trenches.

A few weeks later, he was shot through the shoulder.

He survived, but this time they thought they better give him an honourable discharge.

He cheated death twice in a year of front-line service.

The average life expectancy in the trenches was just 6 weeks, boys as young as 16 served on the frontline.

A century ago, if you managed to come through the war unscathed, you could expect to live to 50 if you were a man, or 55 if you were a woman.

An infection was the most common cause of death.

Tens of thousands of children didn't live to see their first birthday.

Now, thanks to antibiotics, immunisation, better public health and hygiene, a child born in the UK today has a good chance of living to 100.

And we led this change.

Nightingale, Fleming, Crick and the rest.

We must cherish and learn from this proud history, without ever being complacent or captured by the past.

And this is what I believe:

We led this change because of scientific progress.

We did it because technology was harnessed for human good.

We did it because we looked forward.

So, let's look forward now with confidence and optimism – as we have done before.

Let's embrace the innovations.

Let’s believe in Britain.

And let’s shape a better future for all.

News story: Restrictions on adverts for food high in fat, sugar and salt: public asked for views

A new public consultation asks people for their views on ways to reduce the number of adverts for foods high in fat, sugar and salt that children are exposed to.

The consultation sets out proposals to tighten advertising restrictions. The restrictions will limit children’s exposure across the media they engage with most, as part of efforts to tackle childhood obesity.

The restrictions being considered include a 9pm watershed ban on TV, online streaming sites and social media. The restrictions have been designed with a view to encourage industry to develop healthier alternatives.

Data shows children are spending many hours each week watching television and an increasing amount of time online.

Adverts for sugary and fatty foods are more commonly shown than any other category. In 2017, it is estimated that children were exposed to more than 700 million online adverts for foods high in fat, sugar or salt and almost 3.6 billion TV adverts.

Exposure levels on TV have fallen significantly since restrictions around children’s programmes were introduced 10 years ago, but there remains a significant amount of exposure.

Evidence suggests advertising can affect what and when children eat, both just after seeing an advert and in the longer term by shaping children’s food preferences from a young age. This has the potential to affect their likelihood to become or remain overweight as adults.

The proposals would target foods that contribute most to children’s intake of calories. The restrictions would not apply to everyday staples like butter, oil or meat.

As part of the consultation, the government will consider the impact that further advertising restrictions may have on business, particularly broadcasters.

Currently, one in 3 children are overweight or obese and the number of

severely obese children is on the rise. The proposals are part of a series of measures that will support the NHS Long Term Plan and help to halve childhood obesity by 2030.

Health and Social Care Secretary Matt Hancock said:

> We often talk about internet safety and how social media can affect our children's mental health and we are rightly taking action to address that. But what about their physical health? I want my children to grow up knowing what a balanced diet looks like – but their perception of what is healthy can get skewed when the vast majority of adverts they see on screen are for sugary snacks and fast food.
>
> We know these adverts are shown on TV during prime family viewing time, and the evidence suggests this is increasingly being mirrored online too. With a scant 1% of adverts for fruit and vegetables, it's clear there is plenty of room to balance things out. We led the world with our soft drinks levy and today we are proposing to take similar world-first action – for the good of our children's health.

Digital, Culture, Media and Sport Secretary of State Jeremy Wright said:

> We know that childhood obesity is one of the biggest health problems that our country faces. With children spending more time online it's vital that we look at all options to help us take action and improve the health of the nation.
>
> The UK already has some of the toughest advertising restrictions in the world, but it is only right that we explore the impact that further action on TV and online advertising for products that are high in fat, salt or sugar will have on childhood obesity.

Steve Brine, Public Health Minister, said:

> It is not right that our children are mainly exposed to adverts promoting foods high in fat, sugar and salt. Small amounts of excess calories every day over a long time causes obesity. But the evidence is clear that there is no one solution so our plan is about pulling together all the pieces of the jigsaw and tackling childhood obesity from all possible angles.
>
> In fact, the NHS is already preparing to treat more and more children for the serious effects of extreme obesity in the future – so we surely have a duty to address the underlying cause. This isn't about banning everyday staples like butter and olive oil, it's about reducing children's exposure to those products that have

little nutritional value but that are part of a wider climate that is driving childhood obesity.