SCIENCE FICTION IN MEDICAL EDUCATION

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I say I am a fan of science fiction... my wife thinks I have an addiction!

I think science fiction... prepares me for the future. It helps me ask important questions about the future.

Like... what makes us more humanistic than robots? Is Earth our final destination?

These are challenging questions, but these discussions help us prepare for what is coming next!

Let's have a thought experiment:

What if an advanced alien civilisation arrived on Earth?

With amazing spaceships and shiney armour, and beasts... and speak unknown tongues...
I think people would be amazed first, then fear for their life!

This is what Moctezuma, the Aztec leader, thought when he saw Spanish Cortés ships (in 1519!) for the first time with beasts (dogs).

The intention of Cortés to go there was to find the fictional golden city... ...he brought many biologist with him and they pushed the boundaries of science further away...

Even though there was no golden city!

That is the point of science fiction, to push the boundaries... further... and further away.

When I was 6 I was reading the Usborne Children's Dictionary about the human body.

I thought of movies like... and imagined I would learn anatomy in 3D...

But I became a doctor, and tried to learn 3D models in 2D!
One day I watched a video online of a hologram of the human body.

I tried it out... I saw a 3D human model. It had a beating heart. I could remove layers. It was mind-blowing.

That is when I met science fiction. I hope that you meet science fiction too, at least once in your life! To feel the technology was sublime.

What is real, and what is science fiction?

My smart watch has better computing power than the Apple spaceship had that brought people to the moon (and I use it to count steps).

Children build Lego in 3D, in augmented reality.

Ticket Mars.

I can buy a ticket to Mars (still science fiction, but the first Mars mission is in 10 years). We will become a multi-planetary species!

@artfuldiagnosis
But there is no science fiction when you go to see the GP/doctor!

Patients use science fiction technologies at home...

But not in the most important industry of all... healthcare

There is no science fiction in healthcare:

1. Healthcare is not open to innovation

We are slow!

Dr. Laennec (French Physician 1800's) invented the stethoscope... it took 30 years to spread this idea.

It is now the symbol of medicine... now there are digital stethes.

Digital health:

1. Equal Patient-Doctor relationship

2. A re-organization of healthcare

...you need to become the point-of-care!

- e.g., Drones delivering drugs (Rwanda)
- 3D printed drugs!
- Technology and sensors e.g., car early warning lights
- Home

3. We are afraid of the unknown

Robots will not replace us, but may enhance us!
The best science fiction movie is... *2001: A Space Odyssey.*

Please watch it, it is only 3 hours.

It was shot 50 years ago, yet still looks so futuristic.

Kubick was a genius, he didn’t look to Hollywood, to create the future...

... he looked to those working on the future - NASA, IBM

First computer, first space ship

The same applies to patient design

We want to teach students how to care for e-powered patients

- Being digitally literate
- Bring tech to the classroom

VR, health sensors = let the students experience the future in the present

The writer of 2002 Space Odyssey grew up on a farm over 50 years ago...

He asked himself ‘what if’

You could be the next it is about the urge to ask

What if I could change that?