



Date: 14 May 2020

Time: 8:30 am for 9:00 am

Booking: Alison@saapi.org.za

Medical ethics of new technologies in medicine: Workshop

The year is 2035, the first delegation of pioneers have left earth to start a colony of humans on Mars. Developers are ever closer to the 'Singularity' and general artificial intelligence is becoming a ubiquitous part of every day life.

Being in the healthcare field, you are seeing advances in medical technology and personalised medicine you never dreamed you would see in your lifetime — new advances are taking place at an exponential pace.

Your office is comfortably quiet as you sit down to work with your first cup of hot coffee — you tend to make it to the office a little earlier than everyone else to tackle the back log of projects first thing. Your company is producing new releases faster than ever due to the boon in AI and it's opportunities for healthcare.

This morning, you notice an unfamiliar new technology product is in the works. You begin reviewing the details and immediately you feel your chest tighten just a little. 'There is no precedent for this', you think. The pre-clinical trial results are spectacular but, this product is not a device, it's not a medicine — it's some kind of novel biological device.

As you review your substantial knowledge of the Medicines and Related Substances Act, the Regulations relating to Medical Devices and IVDs and the Pharmacy Act - you realise you will need to look on this new product with fresh eyes. What other questions should you be asking that will affect the outcome for your company — but also for patients?

Your mind turns to the ethics of your position. Both for you personally as well as for your company. You need to set out well-devised arguments and a strong positioning for your feedback. This is where your fluency in the more philosophical aspects of medicine and technology will stand you in good stead.

Are you prepared to make those arguments?

SAAPI invites you to join the upcoming workshop on medical ethics.

The workshop will cover the following:

- Would you kill the Fat Man? Introduction to ethical theories and how they apply to cases of new technologies. The role of ethics vs. legal regulation.
- Bioethical Principles: focus on autonomy, justice, beneficence and non-maleficence. Application of these principles in the ethical assessment of new technologies. Exposure to and use of a dilemma checklist.
- Artificial intelligence and machine learning applied to medicine (with an introduction to how machine learning algorithms operate). Application in: wearable technologies, automated chat bots, other digital devices.
- Workshop of ethical issues / benefits specific to these new technologies. Workshop session followed by workshop review.

Learning outcomes:

1. Be able to briefly discuss the basic tenants of ethical theories including: deontology, utilitarianism and virtue ethics.
2. Clear understanding of the difference between a rights-based, legal framework and ethics framework to approaching moral problems.
3. Be able to briefly discuss the main medical ethics principles: autonomy, justice, beneficence and non-maleficence. Be able to apply the principles dilemma checklist to a moral problem.
4. Knowledge of Artificial Intelligence and Machine Learning applications in medicine — specific to diagnostics, wearable devices and chat bots.
5. Growth in confidence when approaching moral problems: ability to identify core ethical questions; see a situation from different perspectives; improved skills of analysis and reflection; increased moral sensitivity.

Who is Candice de Carvalho?

As the founder of Easy Ethics CPD, Candice focuses on the ethics of cutting-edge technologies in medicine.

Candice has experience in delivering CPD ethics talks at conferences and her greatest passion is to re-invigorate the healthcare industry with relevant and engaging ethics content that will both educate and inspire.

Before focusing on ethics, Candice co-founded a digital marketing agency and is interested in new technologies that both improve medical outcomes as well as medical communications.

Candice was selected for the first cohort of FUTURE FEMALES in 2018, beating out over 450 other applicants globally with her new business concept — which is the online CPD platform, Easy Ethics CPD.

Candice holds two Masters' Degrees, and Her Masters research in human genetics studied novel genetic mutations in black and coloured South African cystic fibrosis patients and her Masters in applied bioethics reflected on the question: 'who owns your genetic material?'

In her spare time Candice can be found propagating succulents and is always in search of a new rare succulent species to add to her collection!

Qualifications

- Master of Science (MSc), (Med) Human Genetics (WITS), 2008
- Master of Science (MSc), (Med) Bioethics and Health Law (WITS), 2011