



EASY ETHICS CPD
accredited cpd for health providers

MEDICAL ETHICS OF NEW TECHNOLOGIES IN MEDICINE

SAAPI invites you to join an online course on medical ethics and new technologies in medicine.

INTRODUCTION:

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?

COURSE OUTLINE:

Format of study:

- Self-paced study, flexible
- Log into the portal and play lesson videos in your own time
- Register now, up to 1 October 2020
- Lessons available from 17 August - 13 November 2020

Other features:

- An orientation lesson will be available at the start
- Extended registration option: register up to 1 October 2020; once registered, access to all of the lessons will be provided at one time

Lessons:

Lesson Title	Notes
Artificial Intelligence and Machine Learning in Medicine; Trends & Attitudes	<ul style="list-style-type: none"> • An introduction to AI and ML algorithms • Applications in medicine • Trends in use of AI and wearables in medicine • Research into trends and attitudes of the public toward AI in medicine • The problem of the 'responsibility gap' in AI technologies in medicine • Approx 60 mins
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.	<ul style="list-style-type: none"> • An overview of using ethical theory to make moral arguments • Dive into deontology, virtue ethics and utilitarianism • Approx 60 mins
Chat Bots in medicine and the ethics of the use of medical chatbots	<ul style="list-style-type: none"> • Introduction to various used of ChatBots in medicine • Bioethical Principles: focus on autonomy, justice, beneficence and non-maleficence • Testing chat bots: Use case of Psoriatic Arthritis • Approx. 50 mins
Wearable Devices: Cutting edge technology in wearables	<ul style="list-style-type: none"> • Examples of new wearable devices. • Comparison between User Agreements in technology and the processes of patient informed consent • Approx. 60 mins



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How does it work?

- Once registration and payment is received, each delegate will be provided with back-end access on the SAAPI website.
- The webpages with the course lessons will be easy to access and each lesson will consist of various videos.
- Delegates are encouraged to complete the video lessons and, if there are any questions on the course content, to reserve them for the live Q&A session.

Scheduled LIVE Q&A session (45 – 60 mins):

- All delegates are invited to attend the scheduled Q&A session on **13 November 2020 at 10 am** on Microsoft Teams.
- Please liaise with Alison Blackhurst at alison@saapi.org.za for your registration for, and link to, the live session.

Learning outcomes:

✓ Be able to briefly discuss the basic tenants of ethical theories including: deontology, utilitarianism and virtue ethics.
✓ Clear understanding of the difference between a rights-based, legal framework and ethics framework to approaching moral problems.
✓ 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.
✓ Knowledge of Artificial Intelligence and Machine Learning applications in medicine — specific to diagnostics, wearable devices and chat bots.
✓ 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.



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Facilitator: 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