## **Radiotherapy Physics**

### What does a Radiotherapy Physicist do?

#### **Treatment Planning**

- Physicists work as part of a team to create each patient's individual treatment plan
- Use dedicated software to model and plan the treatment beams, to ensure they deliver the right dose of radiation to the right area

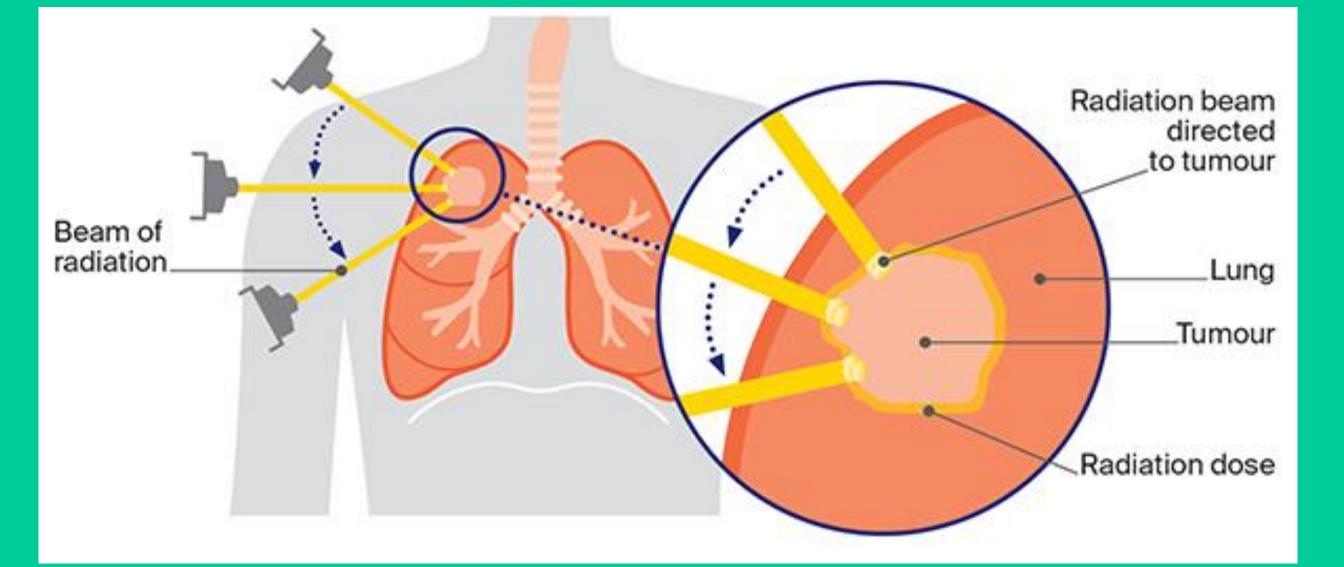


#### **Machine Quality Assurance**

Physicists design and perform a range of tests on treatment

Source: Physics World, https://physicsworld.com/a/reinforcing-the-case-for-independent-qa-in-the-radiation-oncology-clinic/

equipment to make sure they are safe to use and can accurately deliver patient treatment

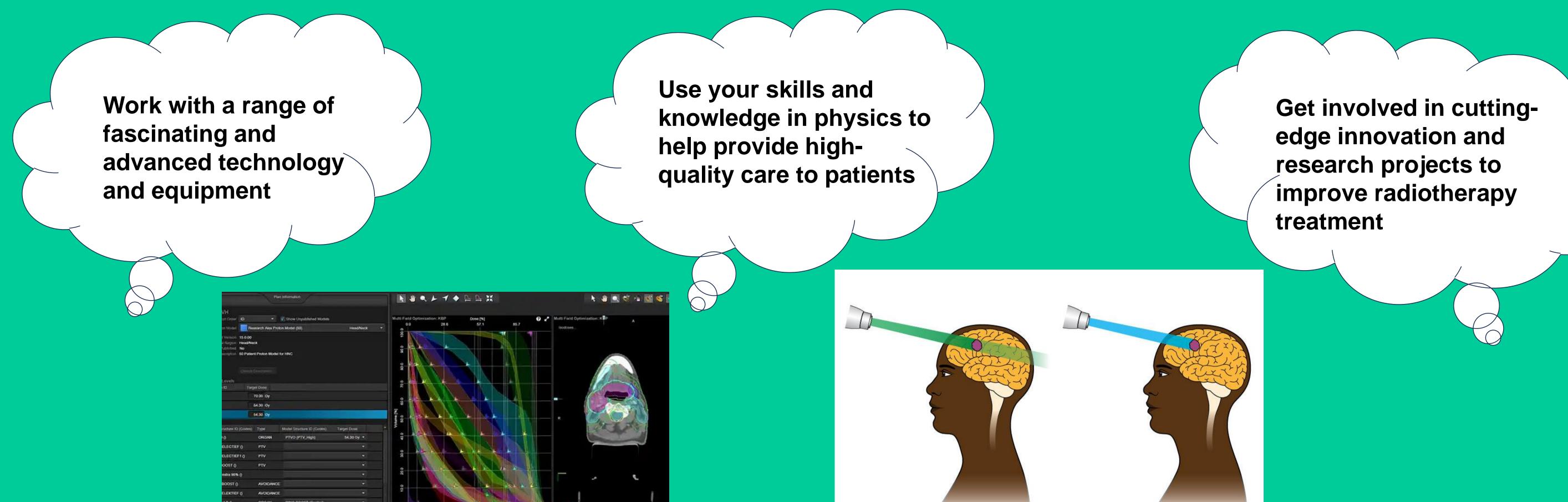


Source: Cancer Council NSW, https://www.cancercouncil.com.au/lungcancer/treatment/radiotherapy/

#### **Research and Innovation**

- Physicists are heavily involved at the frontiers of research in radiotherapy
- Can include working on clinical trials and developing treatment techniques
- Current research areas include use of Al in radiotherapy, proton therapy and personalised radiotherapy

# Why become a Radiotherapy Physicist?



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Source: Varian, https://www.varian.com/products/radiotherapy/treatmentplanning/eclipse

Standard radiotherapy

Proton beam therapy

Source: Macmillan Cancer Support, https://www.macmillan.org.uk/cancer-information-andsupport/treatment/types-of-treatment/radiotherapy/external-beam-radiotherapy/proton-beam-therapy

Experience a diverse and varied field of work where you can apply and expand your knowledge and technical skills



Source: Radiation Oncology Systems, https://www.oncologysystems.com/blog/varians-newest-linac-what-will-comeEmbark on a career where you can learn, develop and challenge yourself every day

next