

**Cape Town** 



- Legislative capital and second largest city in South Africa.
- Population 5 million (2024).
- Iconic tourist destination for its beauty, biodiversity and vibrant atmosphere (9 million tourists in 2024).



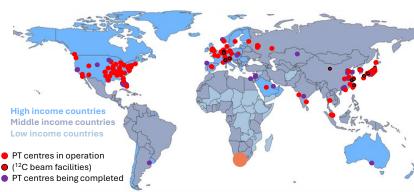
**Cape Town** 



- Ranked 1<sup>st</sup> in Africa and 167<sup>th</sup> globally [Times Higher Education (2024)].
- Ranked 78<sup>th</sup> globally for Medical & Health [Times Higher Education (2024)].
- 30000 students (40% postgraduate); 5000 staff.
- World-leading research programmes and strong history of innovation, including revolutionary medical and technological advancements, e.g. first human heart transplant (Barnard), CT (Cormack), and crystallographic electron microscopy (Klug).
- Two medical teaching hospitals:

Red Cross War Memorial Children's Hospital (paediatrics) and Groote Schuur Hospital.







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# Returning proton therapy to Southern Africa

https://protontherapy.uct.ac.za

## **Our vision**

Proton therapy facility with two treatment roomswith a strong emphasis on paediatric carewith a secondary 30 MeV cyclotron facility (p, d, α)for radioisotope production and research

- Situated in Cape Town but for the entire Southern African region.
- Ecosystem of excellence for research and innovation at UCT.
- Strong public-private relationship for business model, and including a foundation to support paediatric treatment.
- State-of-the art in patient experience in Africa for Africa.
- Drawing strongly on the nexus of world-leading physics, radiation oncology and neuro-clinical specialties, and the local expertise and experience of iThemba LABS (523 patients treated between 1993 and 2017).

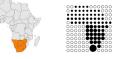
## South Africa



- Population 64 m (2025); 26% < 15 years; 11% > 60 years; proj. 22% increase by 2050; [UN World Population Prospects (2024)].
- GDP ~\$403 billion (2024); largest in Africa.
- Healthcare expenditure 8-9% of GDP.
- Dual healthcare system: 84% public sector and 16% private sector (medical insurance or direct payments).

### **Southern Africa**

• Population 91 million (2025).



• Projected 29% increase by 2050.

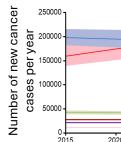
### **Cancer in South Africa and Africa**

- Incomplete registries and underreported cases.
- South Africa: 111 000 new cases of cancer per year (2024).

Neuroscience

nstitute

• South Africa: 50% of cancer cases treated with photons.



PEPARTMENT OF

PHYSICS

• By 2050 about 40% of the world's child population is projected to be in Africa, with increasing rates of cancer [Lancet 20 (2019)].

> Project officially launched (29 January 2025) by MEC Health and Wellness Mireille Wenger (centre)

#### Western Cape Government FOR YOU

shown with (left to right) Prof Graham Fieggen, Prof Jeannette Parkes, Prof Mosa Moshabela (Vice chancellor UCT), and Prof Andy Buffler (UCT PTI Chair). [andy.buffler@uct.ac.za]