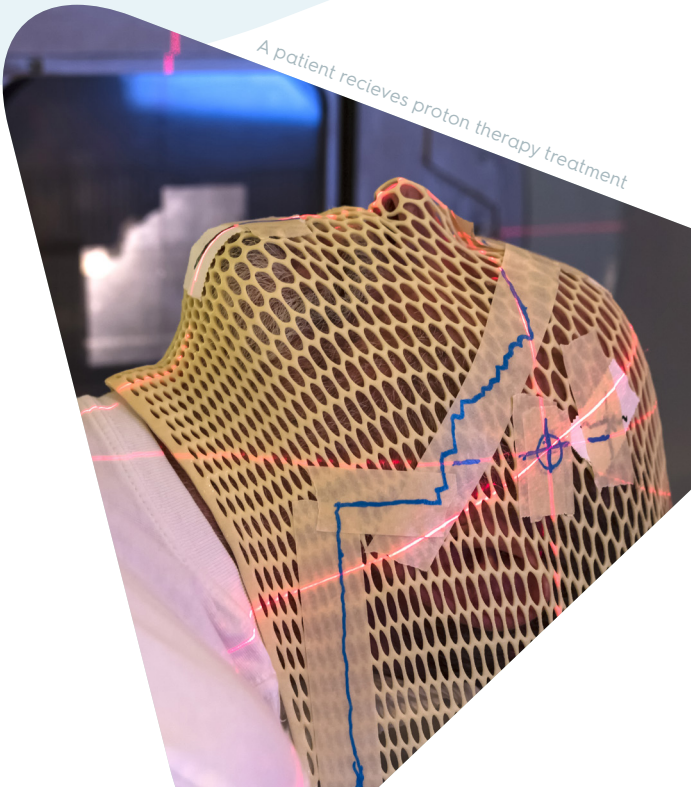
AUSTRALIAN BRAGG CENTRE
FOR PROTON THERAPY AND RESEARCH

Bringing the most advanced cancer treatment and research to Australia.

what is proton therapy?

Proton beam therapy is a type of radiation treatment that targets tumours with high-energy, positively charged particles (protons). It is a more precise alternative to X-ray (photon) radiation treatment, which is more commonly used to treat cancers.

The precise nature of proton therapy, with the ability to target cancer cells at a specific depth inside the patient, means there is less radiation delivered to healthy tissue surrounding the tumour. This can result in fewer side-effects for the person being treated. It also makes proton therapy a safer treatment option for children and adolescents since their rapidly growing and developing cells are more susceptible to damage from the radiation.



A patient recieves proton therapy treatment

A render of the proton beam therapy system

about the centre

The Australian Bragg Centre for Proton Therapy and Research will provide proton radiation treatment to paediatric, adolescent and adult patients with rare cancer types. It will be Australia's first proton therapy unit and the first of its kind in the southern hemisphere.

Proton therapy delivers precise, non-invasive radiation that has the capacity to eliminate tumours while minimising exposure to surrounding healthy tissues, enabling safer treatment of cancers in younger patients and cancers that are close to vital organs.

The building is expected to be completed in 2023. From then, the proton therapy machine will undergo 12-18 months of installation and testing before patient treatment begins.

Site works officially commence, June 2020

design & construction

The Australian Bragg Centre was designed by Woods Bagot, the same architectural firm responsible for the distinctive “Cheesegrater” SAHMRI building next door.

Commercial & General is managing the project and has engaged Lendlease as the builder.

the technology

The Australian Bragg Centre for Proton Therapy and Research will operate a Radiance 330 proton beam therapy system, designed and manufactured by ProTom International.
It is the same system that is in operation at Massachusetts General Hospital in Boston, USA.

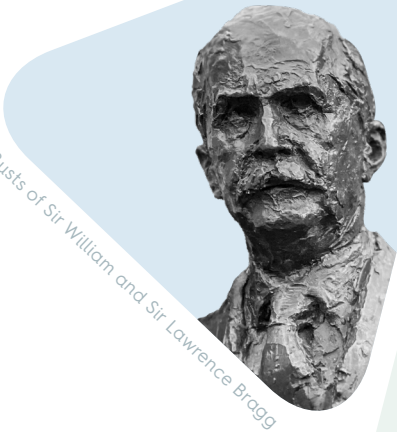
who are the Braggs?

The Australian Bragg Centre is named in honour of Adelaide-born physicist Sir William Lawrence Bragg and his father Sir William Henry Bragg who together won the Nobel Prize for Physics in 1915.

Sir William was born in Westward, England in 1862 and moved to Adelaide after earning the position of Elder Professor of Mathematics and Experimental Physics at the University of Adelaide in 1885.

Sir Lawrence Bragg was born in Adelaide in 1890. He was just 25 years old when he won the Nobel Prize for Physics with his father – still the youngest ever to earn the honour.

In 1904, Sir William Bragg published his discovery of the 'Bragg Peak', which describes where the maximum energy of a proton beam will be deposited. This discovery is the foundation of proton therapy's capacity to deliver highly targeted radiation that minimises damage to surrounding healthy tissue.



Busts of Sir William and Sir Lawrence Bragg

A render of the proposed Australian Bragg Centre building

To find out more about the Australian Bragg Centre for Proton Therapy and Research, please contact:

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