

## Movie magic makes for medical marvel

By Peta Rasdien

THE technology that helped bring the Lord of the Rings movies to life is responsible for a medical first in WA which could be adopted internationally.

The FastSCAN system is taking the stress and time out of radiation therapy for facial cancer cases.

The same technology which helped build the faces of the Tolkien characters is now helping make plastic masks for patients to wear during radiotherapy.

The masks help patients who require radiation therapy for cancers of the head and neck remain immobile and allow more precise treatment.

In the past, the masks were made from plaster impressions which took much longer, up to five days, and were messier to make.

Now a hand-held laser scanner copies an image of the face to a computer which can then be used to guide the construction of a plastic face mask.

The technology is the brainchild of radiation therapist Brendan McKernan and medical

technology and physics team leader Tom Deans. Sir Charles Gairdner Hospital clinical professor David Joseph said the technology simplified the treatment process. "A lot of patients who can have tumours which can be quite small need to have very precise treatment, and that means that the patient needs to be immobilised, in as comfortable a process as possible," he said.

"What this enables you to do is cut the amount of time that patients require to be there for the immobilisation process and also to allow it to be more accurate than normal.

"It is the same type of technology used to make the Lord of the Rings-type faces and it is really using modern technology and translating it into a new process where we can actually use it to benefit patients."

Health Minister Jim McGinty said the technology had broader medical implications, including for burns patients.

"I'm sure this very exciting development will go worldwide in the treatment of cancer patients," he said.



Fast Masks: Sir Charles Gairdner Hospital radiation therapist Brendan McKernan with FastSCAN and patient Daniel Lambert. Picture: Rod Taylor