

Information for patients

Movement Analysis Service



ORLAU

The Orthotic Research &
Locomotor Assessment Unit

WELCOME TO ORLAU!

You're here so we can have a look at how you **walk**.

When you visit our **Gait Lab** you'll meet a team of specialists who will be looking at how your joints and muscles work when you walk.

"Gait" means "walking"

Receptionist

We will use what we find to help us plan your treatment.

Your appointment may take two hours or more - so let's get started!

Physiotherapist or "Physio"

girls can wear crop-tops.

We ask boys to take their teeshirts off.

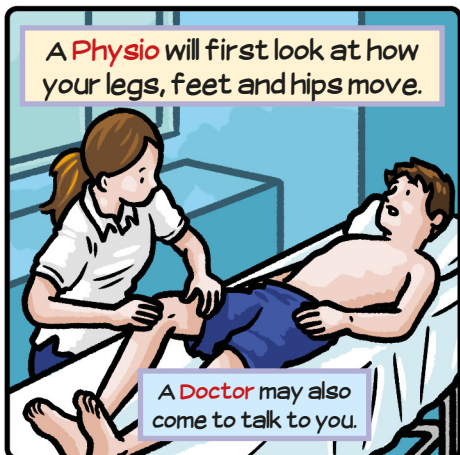
Because we need to see how all your **joints** and muscles work as clearly as possible, you'll have to wear shorts.

hip joint

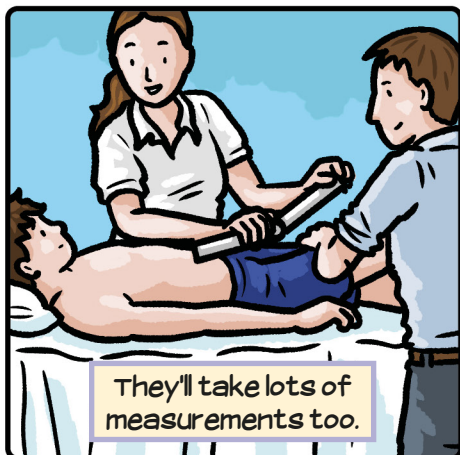
knee joint

ankle joint

A **Physio** will first look at how your legs, feet and hips move.

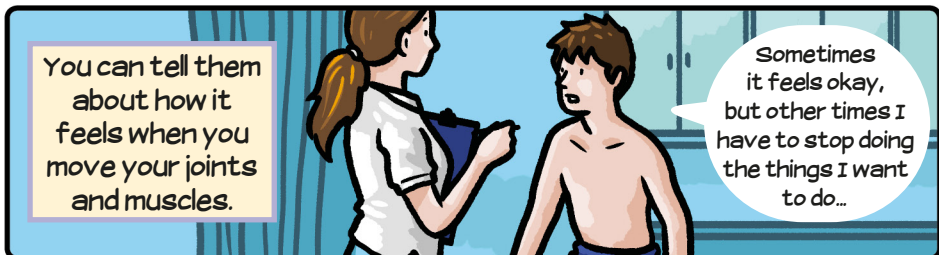


A **Doctor** may also come to talk to you.



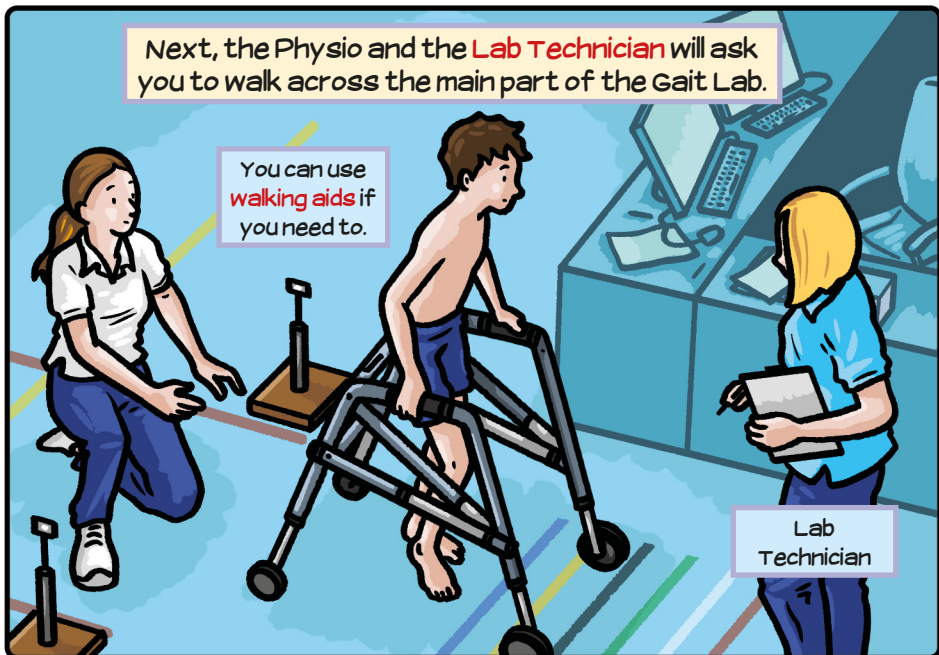
They'll take lots of measurements too.

You can tell them about how it feels when you move your joints and muscles.



Sometimes it feels okay, but other times I have to stop doing the things I want to do...

Next, the Physio and the **Lab Technician** will ask you to walk across the main part of the Gait Lab.



You can use **walking aids** if you need to.

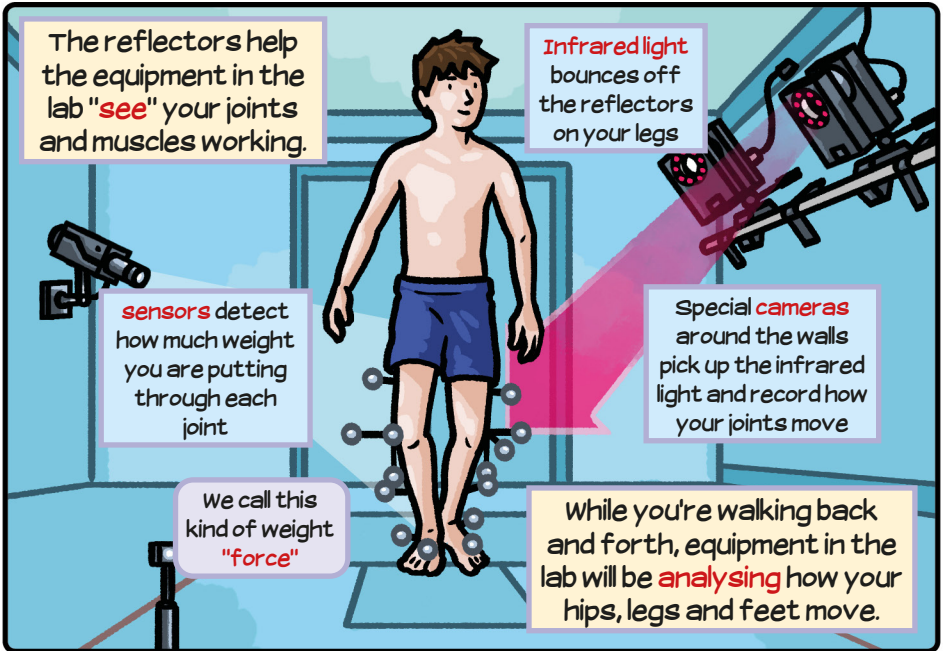
Lab Technician



They don't hurt and they come off really easily - don't worry!

A reflector

The physio will stick special **reflectors** to your joints.



The reflectors help the equipment in the lab "**see**" your joints and muscles working.

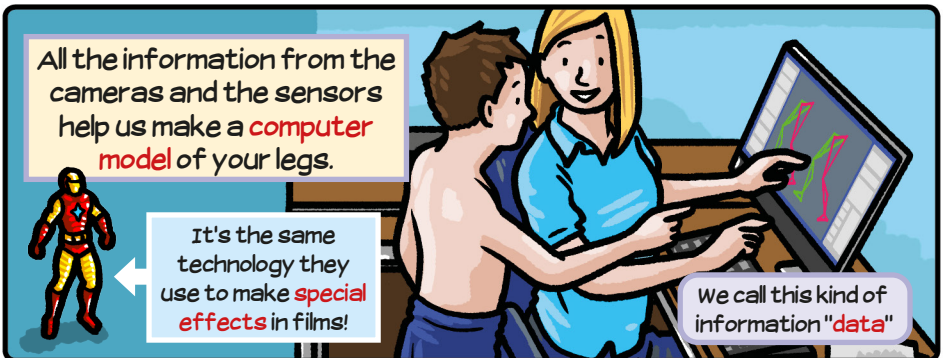
Infrared light bounces off the reflectors on your legs

sensors detect how much weight you are putting through each joint

Special **cameras** around the walls pick up the infrared light and record how your joints move

We call this kind of weight "**force**"

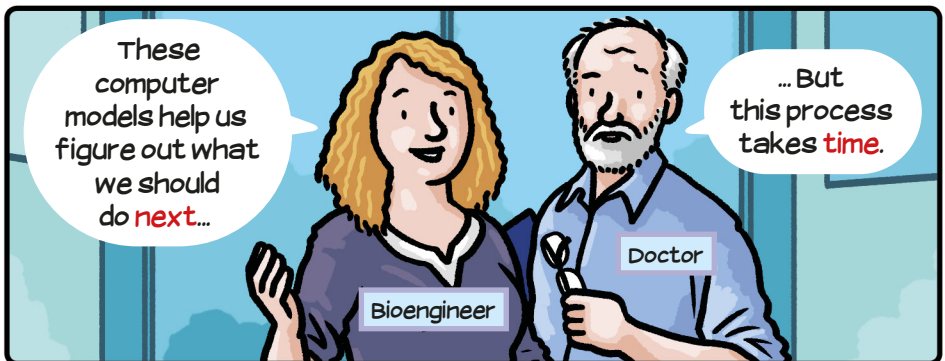
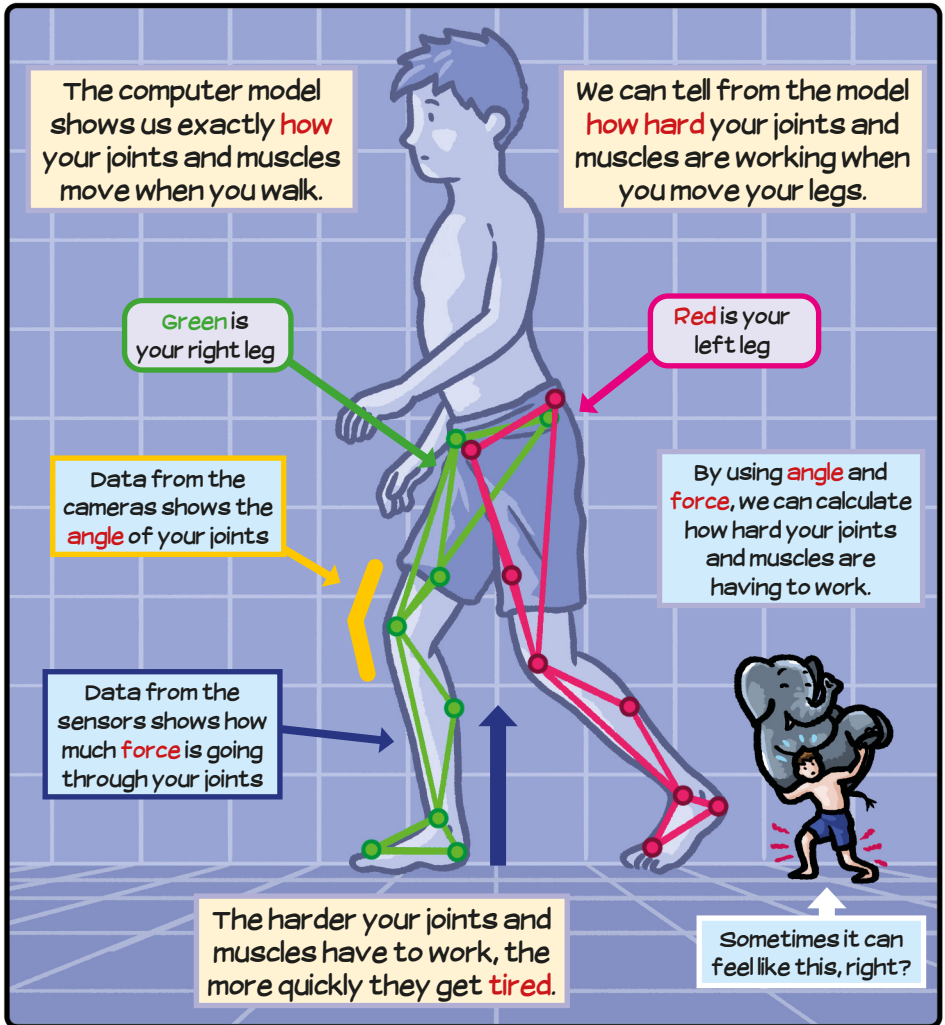
While you're walking back and forth, equipment in the lab will be **analysing** how your hips, legs and feet move.



All the information from the cameras and the sensors help us make a **computer model** of your legs.

It's the same technology they use to make **special effects** in films!

We call this kind of information "**data**"



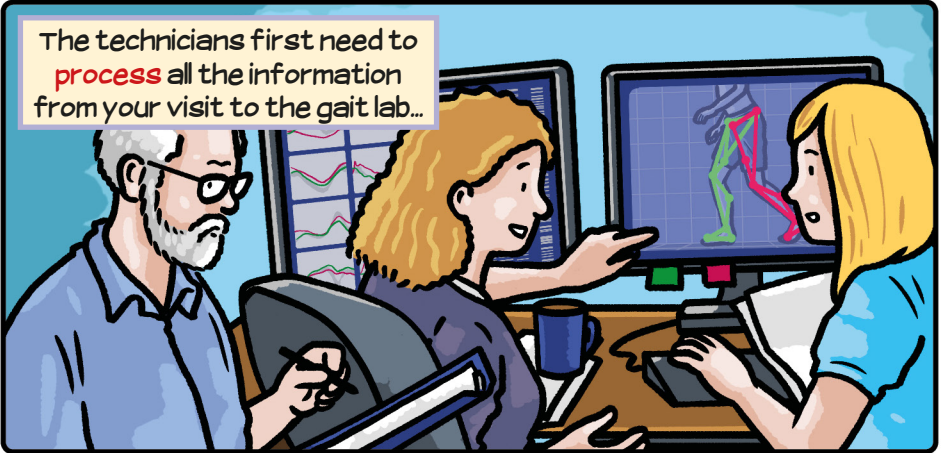
Once your visit is over you will go home...



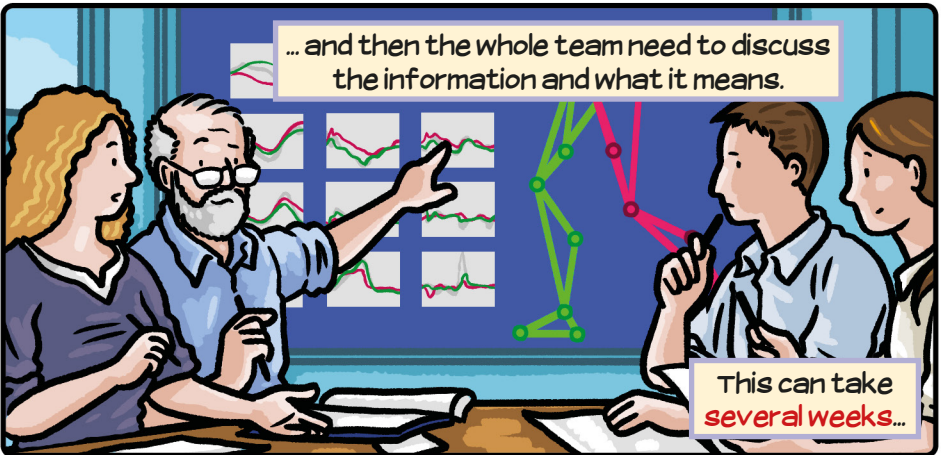
But we will **keep working!**



The technicians first need to **process** all the information from your visit to the gait lab...

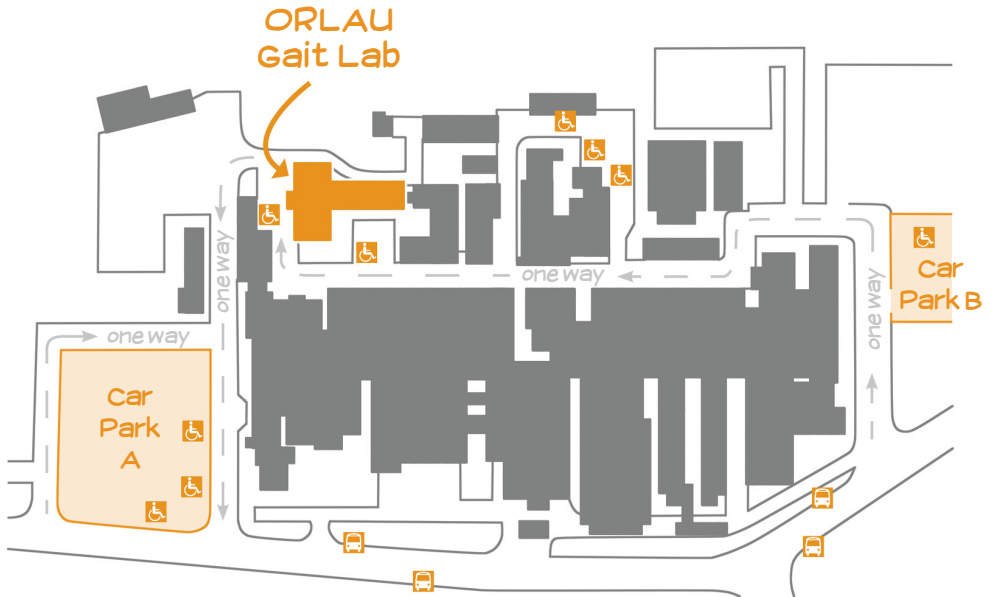


... and then the whole team need to discuss the information and what it means.



This can take **several weeks...**





The ORLAU Gait Lab is located at the back of the Robert Jones and Agnes Hunt hospital complex. You can park in Car Parks A or B and walk, or there are a limited disabled and non-disabled parking spaces located near the building itself. Note that the roads through the hospital are one-way. The entrance to the building is marked by the arrow on the map above, and reception is right inside the main door.

For more information about gait labs in the UK and Ireland see cmasuki.org

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Tell us what you think of this patient information leaflet. Please send your comments to the Patient Advice and Liaison Service (PALS) email: pals.office@rjah.nhs.uk

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